## SEQUENCE LISTING

<110> W	Jeaver, Zoe	
	Process for Identifying Anti-Cancer Therapeutic Agents Using Cancer Gene Sets	
<130> 6	89290-77	
	JS/60/233,133 2000-09-18	
	JS/60/234,009 2000-09-20	
	US/60/234,034 2000-09-20	
	S/60/234,509 000-09-22	
	IS/60/234,567 000-09-22	
<160> 13	392	
<170> Pa	ratentIn version 3.0	
<210> 1 <211> 32 <212> DI <213> Ho	26 NA omo sapiens	
<400> 1 gcgcacccc	gg ttcagctcgc ctttcttggc cagagggccc ggttggactc acgggcgggg	60
	to observe and and an anti-	120
ctttgctgg	gg atgcagatgt acageegtea getggeetee acegagtgge teaceateea	180
gggcggcct	tg cttggttcgg gtctcttcgt gttctcgctc actgccttca ataatctgga	240
gaatcttgt	tc tttggcaaag gattccaagc aaagatcttc cctgagattc tcctgtgcct	300
cctgttgg	ct ctctttgcat ctggcc	326
<210> 2 <211> 33 <212> DI <213> Ho	35 NA omo sapiens	
<400> 2	ta tagccatgat tgaaatcaaa tagtaaaggc tgttctggct ttttatcttc	<b>C</b> 0
	## ###################################	60 120
		180
	to the atthe	240
		300
		335
<210> 3 <211> 23 <212> DN <213> Ho	35 NA omo sapiens	
<400> 3 cccaqtqca	at tegeatgegt ggaegetgtg tggagagtee aggatgaegg gatecegeae	60
		20

gaagaattgt geettgeata ttaettgage ttaaaetgae aacetggatg taaataggag eetttetaet ggtttattta ataaagttet atgtgatttt ttaaaaaaaga aaaaa	180 235
<210> 4 <211> 308 <212> DNA	
<213> Homo sapiens	
<400> 4 accagttgga cattgttttt ttctggttat cctgtcctgc cttactatga gatttacgga	60
tgtttgggga cacaggtctc tgggctcatt tctttttctg aggattcata taattgccta	120
gtttttggct tagaggttgg tccttccctg gtttaatgat gcttttgttc agactgtcct	180
ctaggacttg aatttgaagc agaaacagaa cagcacctga tcctcagtta tactgcaaag	240
cagggcctca gaaagggtaa ctccaattac tgactttcac ctaaggtgaa aaagcatccg	300
gcttcttt	308
<210> 5 <211> 486 <212> DNA <213> Homo sapiens	
<400> 5 ttttttttt getgtaggea ceattetgea tettgaacce agaetgaagt gtgeetetea	60
cagatggaag gtgcacacgc tectgtetec tectcactet gecacgttca ettggetttt	120
tcattggtac ctaggaattt aagaatatcg aagcgagaca cgtaacaaac catagatgag	180
cagactecca cacegggttt tettgecegt etttaaggea etgtttetaa attttgaact	240
tagetetgaa teeceaagaa ettgageaca geaagggttg etgagetget gtegeegeag	300
ecetggeece tggtgetgga getgeageae etttgggaga ggteetgegt egteeteage	360
tgcgtcgctg tgaactcccg ctctccactg tgttcctcag tgtctgcttt tcaggaagtc	420
tgctgtgacc tttgcccaac ttctgagctc ctcagggact aggaacaatt tcagtagctt	480
	486
tgccct	
<pre>tgccct  &lt;210&gt; 6 &lt;211&gt; 379 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 6</pre>	486
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc	<b>4</b> 86
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc	486 60 120
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens  <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac	486 60 120 180
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccetccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt	486 60 120 180 240
tgccct  <210> 6 <211> 379 <212> DNA <212> DNA <213> Homo sapiens  <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgccct	486 60 120 180
tgccct  <210 > 6 <211 > 379 <212 > DNA <213 > Homo sapiens  <400 > 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgcccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat	60 120 180 240 300
tgccct  <210> 6 <211> 379 <212> DNA <212> DNA <213> Homo sapiens  <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgccct	60 120 180 240 300 360
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens  <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat aaaataacgt gtgtctttc  <210> 7 <211> 456 <211> DNA <213> Homo sapiens <400> 7	60 120 180 240 300 360 379
tgccct  <210> 6 <211> 379 <212> DNA <213> Homo sapiens  <400> 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctgg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat aaaataacgt gtgtctttc  <210> 7 <211> 456 <212> DNA <213> Homo sapiens  <400> 7 catatataca tgcagtctgc ttgattaca gcaaaatggt cagcctttat cagatagtt	60 120 180 240 300 360 379
<pre></pre>	486 60 120 180 240 300 360 379
<pre></pre>	60 120 180 240 300 360 379
<pre> &lt;210&gt; 6 &lt;211&gt; 379 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;400&gt; 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctg aaccctcct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagttt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgcccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat aaaataacgt gtgtcttc  </pre> <pre> &lt;210&gt; 7 &lt;211&gt; 456 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;400&gt; 7 catatataca tgcagtctgc ttgattatca gcaaaatggt cagcctttat cagatagtt cttcatgtgg agttcatctg catgtggccc ttactctgaa gcctttat cagatagtt cttcatgtgg agttcatctg catgtggccc ttactctgaa gcctcttcct gatctgagc cacagtctgt ctgtcttcca gttcatctca gtcctcgaga aaggcccttt aaaatagtca ctttcccatt ttcctttaac catgggttgt gtgagccaga aagagctttg agaaagatgg</pre>	60 120 180 240 300 360 379 60 120 180 240
<pre> &lt;210&gt; 6 &lt;211&gt; 379 &lt;212&gt; DNA &lt;211&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagtt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgcccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat aaaataacgt gtgtcttc  &lt;210&gt; 7 &lt;211&gt; 456 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 7 catatataca tgcagtctgc ttgattatca gcaaaatggt cagcctttat cagatagttt cttcatgtgg agttcatctg catgtggccc ttactctgaa gcctcttcc caagtctgt ctgtcttcca gtcatctca gtcctcgaga aaggccctt aaaatagtc cttcccatt ttcctttaac catgggttgt gtgagccaga aaggccttt agaaaagatgg ctgcttccac cagggtggag gcttctaggt ctgcatgatg atgggcccg tttctggcca ttcctagatg agaaagatgg ctgcttccac cagggtggag gcttctaggt ctgcatgatg atgggcccg tttctggcca ttcctcatgatgatgatgatgatgatgatgatgatgatgatgatga</pre>	60 120 180 240 300 360 379 60 120 180 240 300
<pre></pre>	60 120 180 240 300 360 379 60 120 180 240 300 360
<pre> &lt;210&gt; 6 &lt;211&gt; 379 &lt;212&gt; DNA &lt;211&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 6 ggaggaggcc cctgtgagcc cactctggaa cccttcctg aaccctccct actctgtccc cctacagaca accaagcact aatcccctta gtaccaagaa aggggagcca ggatttagtc ctggcccagc ccagagctgg gacctggagc acgatctgtt gacttccctg ggtaggacac tgccacctct gggctcaggt cctcatgcct ccaaatggca tctagagtt gagcagcctt cttggctgag gcaggcctag cctgtggagc gggctagggc caggagcatt tggtgcccct ccatgttgca atgcaaacac cttcaccact ggggcagtgg ggagagatgg ctatattaat aaaataacgt gtgtcttc  &lt;210&gt; 7 &lt;211&gt; 456 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 7 catatataca tgcagtctgc ttgattatca gcaaaatggt cagcctttat cagatagttt cttcatgtgg agttcatctg catgtggccc ttactctgaa gcctcttcc caagtctgt ctgtcttcca gtcatctca gtcctcgaga aaggccctt aaaatagtc cttcccatt ttcctttaac catgggttgt gtgagccaga aaggccttt agaaaagatgg ctgcttccac cagggtggag gcttctaggt ctgcatgatg atgggcccg tttctggcca ttcctagatg agaaagatgg ctgcttccac cagggtggag gcttctaggt ctgcatgatg atgggcccg tttctggcca ttcctcatgatgatgatgatgatgatgatgatgatgatgatgatga</pre>	60 120 180 240 300 360 379 60 120 180 240 300

<210> 8 <211> 303

<210> 12

<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 8 gatccagcgg cagtgacaga atccaaagag ggaacagagg catcagcatc gaaggggctg gagaagaaag agaaatgatg cagctggtgc ccgagcctct cagggccaga ccagacagat gggggctggg cccacacagg cgtgcaccgg gtagagngca caggtaggcc aaggggnagc tcccaggaca gggcaagggg gcagcangga tacctgcnag ccagggnctc tntggcctnt nttttcctan tccnttttt tggcccttct ttttntntg ccgtacancn tgcaggcaaa agn</pre>	60 120 180 240 300 303
<pre>&lt;210&gt; 9 &lt;211&gt; 297 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<pre>&lt;400&gt; 9 cttttttca ggttaaatat ataattncaa gtgcttttaa tgaacttatt tttaattggc tagggagcaa aaaataagtn agtnctgctt ttagttagtt aaccttgttc ttttcttaaa tagtacactg catggtattt aatattccag gaagcatggg atttnatttt gcttgatttg ggcacatgaa ataatagctc taggaaaatg cgcatcttaa tgactctttg taaagagagg catttcttac aactgtgatg tttgcttaca taaaagttac ctcataagtt aattcta</pre>	60 120 180 240 297
<210> 10 <211> 363 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 10 attttctcca cctttgttta tatggtaaag gaatcctttt cagctgccag ttttgaataa tgaatatcat attgtatcat caatgctgat attttaactg agttggtctt taggtttaag atggataaat gaatatcact acttgttctg aaaacaggtt tgttgctttt natctcgctg cctagattga aatattttgc tatttcttct gcataagtga cagtgaacca attcatcatg agtaagctcc cttctgtcat tttcattgat ttaatttgtg tatcatcaat aaaattgtat gttaatgctg gaaagaaaaa aagaagaaag aaagaaacca tccctgtcct tcagtttata atc</pre>	60 120 180 240 300 360 363
<210> 11 <211> 335 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 11 ctagaataaa ggggttgatt agtctgaaca gtactaatta actacaaaat aaacgttagt gantcagcct cttcctctat aaacaatgac caattagacg tttccgtaat tccatgtatt atgtatagta cactctataa atgtaaatgt aatgcttgtc taaaaaagtgc aatttattgt acattgtccc aacaaatgtt tacttttata atcgttatga acttgaattg gattagtatc ttgttttat gtgtgaatga agccttgtga aataacaaat gcaactgaga aggtacaagg tgactgtttt tgtgagccag tgatgtttc aatgc</pre>	60 120 180 240 300 335

<211> 1522 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 12 aaaagaggaa accaacccct aagatgagct ttccatgtaa atttgtagcc agcttccttc</pre>	60
tgattttcaa tgtttcttcc aaaggtgcag tctccaaaga gattacgaat gccttggaaa	120
cctggggtgc cttgggtcag gacatcaact tggacattcc tagttttcaa atgagtgatg	180
atattgacga tataaaatgg gaaaaaactt cagacaagaa aaagattgca caattcagaa	240
aagagaaaga gactttcaag gaaaaagata catataagct atttaaaaat ggaactctga	300
aaattaagca totgaagaco gatgatoagg atatotataa ggtatoaata tatgatacaa	360
aaggaaaaaa tgtgttggaa aaaatatttg atttgaagat tcaagagagg gtctcaaaac	420
caaagatctc ctggacttgt atcaacacaa ccctgacctg tgaggtaatg aatggaactg	480
accccgaatt aaacctgtat caagatggga aacatctaaa actttctcag agggtcatca	540
cacacaagtg gaccaccagc ctgagtgcaa aattcaagtg cacagcaggg aacaaagtca	600
gcaaggaatc cagtgtcgag cctgtcagct gtccagagaa aggtctggac atctatctca	660
tcattggcat atgtggagga ggcagcctct tgatggtctt tgtggcactg ctcgttttct	720
atatcaccaa aaggaaaaaa cagaggagtc ggagaaatga tgaggagctg gagacaagag	780
cccacagagt agctactgaa gaaaggggcc ggaagcccca ccaaattcca gcttcaaccc	840
ctcagaatcc agcaacttcc caacatcctc ctccaccacc tggtcatcgt tcccaggcac	900
ctagtcatcg tcccccgcct cctggacacc gtgttcagca ccagcctcag aagaggcctc	960
ctgctccgtc gggcacacaa gttcaccagc agaaaggccc gccctcccc agacctcgag	1020
ttcagccaaa acctcccatg gggcagcaga aaactcattg tccccttcct ctaattaaaa	1080
aagatagaaa ctgtcttttt caataaaaag cactgtggat ttctgccctc ctgatgtgca	1140
tatccgtact tccatgaggt gttttctgtg tgcagaacat tgtcacctcc tgaggctgtg	1200
ggccacagcc acctctgcat cttcgaactc agccatgtgg tcaacatctg gagtttttgg	1260
tetecteaga gagetecate acaccagtaa ggagaagcaa tataagtgtg attgcaagaa	1320
gtgtagagga ccgagccaga aatcttagag atttcttgtc ccctctcagg tcatgtgtag	1380
atgcgataaa tcaagtgatt ggtgtgcctg ggtctcacta caagcagcct atctgcttaa	1440
gagactetgg agtttettat gtgeeetggt ggacaettge ceaecateet gtgagtaaaa	1500
gtgaaataaa agctttgact ag	1522
<210> 13 <211> 531 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 13 ttaaagattg gcaatgtatg tgagagtatg catatgtatg ggtgtgtgtg tgtgcgcgca</pre>	60
atcaaactgt ggtgtaaata gattctcagt gaattctggt attcagactc tattccacta	120
gtgaaagaac cattttttaa acttcccttg ccttttttat ttatttaatt ttcttggttt	180
ggagatgtca gtcccaaaca ccagagtctg tacttttcta taacacagct cagattaagg	240
tagggcatat gcaacggagg ttctcacctc cctaaagaag ggacttgaat tttagggact	300
ttaattcacc cctccttcaa tacaactttc ccccttcttg tttgcacatg ccaagataac	360
tgcttttatg caggctgtac ccccttgaaa aatcctttct acagtgctgg tcacaaaaga	420
geccaagtte ggeeteetae eeggnattge tgaettgaat teanagtege egagtetaee	480
tagetttett ggaageagte tegeaaaatn tetatttgtn egteactaat g	531
<210> 14 <211> 381 <212> DNA <213> Homo sapiens	
<400> 14 gatatttgaa tttagcaggt ggagtttcat agtaaaaaca gcttttgact cagctttgat	60

```
ttatcctcat ttgatttggc cagaaagtag gtaatatgca ttgattggct tctgattcca
                                                                     120
attcagtata gcaaggtgct aggtttttc ctttccccac ctgtctctta gcctggggaa
                                                                     180
                                                                     240
ttaaatgaga agcettagaa tgggtggccc ttgtgacctg aaacacttcc cacataagct
                                                                     300
acttaacaag attgtcatgg gagctgcaga ttccattgcc caccaaagac taggaacaca
                                                                     360
cacatatcca tacaccaaag ggaaaggaca atttctggaa atgctgtttc ttctgggtgg
                                                                     381
gttccctctt ctgggcttgc t
      15
2894
DNA
Homo sapiens
      misc feature
n=a,t,g or c
^{<\!400>} 15 gggcggacag gcacagaggg agggagcgag cgagcagtga gtaagccagc aagggcggtc
                                                                      60
gggtcccgag gtcagccgag atttctcagg tccctccggc cccctccctg gagtccacag
                                                                     120
180
gtggatcagg aagtgaagct caaggttgat tctttcaggg agcggatcac aagtaaggca
                                                                     240
                                                                     300
gaagacttgg tggcaaattt tttcccaaag aagttattag aacttgatag ttttctgaag
gaaccaatct taaacatcca tgacctaact cagatccact ctgacatgaa tctcccagtc
                                                                     360
                                                                     420
cctgacccca ttcttctcac caatagccat gatggactgg atggtcccac ttataagaag
cgaaggttgg atgagtgtga agaagccttc caaggaacca aggtgtttgt gatgcccaat
                                                                     480
gggatgctga aaagcaacca gcagctggtg gacattattg agaaagtgaa acctgagatc
                                                                     540
cggctgttga ttgagaaatg taacacgcct tcaggcaaag gtcctcatat atgttttgac
                                                                     600
ctccaggtca aaatgtgggt acagctcctg attcccagga tagaagatgg aaacaacttt
                                                                     660
                                                                     720
ggggtgtcca ttcaggagga aacagttgca gagctaagaa ctgttgagag tgaagctgca
tettatetgg accagattte tagatattat attacaagag ccaaattggt ttetaaaata
                                                                     780
                                                                     840
gctaaatatc cccatgtgga ggactatcgc cgcaccgtga cagagattga tgagaaagaa
                                                                     900
tatatcagec tteggeteat catateagag etgaggaate aatatgteac tetacatgae
                                                                     960
atgateetga aaaatatega gaagateaaa eggeeeegga geageaatge agagaetetg
                                                                    1020
tactgaggcc agggccaggg ccaggggact ctgtgagtct ggctcaagac cgacattgcc
                                                                    1080
ttggtttgtt acatgactat cgtgatgggg aaactggctg gaaatagtaa tcacacctct
                                                                    1140
ctgtttttag ttagagtcta atgaaactct catctagttc tgtgatgtgt ttacctcttt
                                                                    1200
tttcaggcct caggaactct tctatttcct tccctaatac cccacaccca acctgtcgta
                                                                    1260
atttctggag aactccaggt ttgtgtgtgc aggatgttgg cacaaaaata cctgtgtttt
                                                                    1320
cattetecce etetetecet cetgtgtetg gegetttatg ttttetteeg tttgataatt
agttggttaa aagctgaggg aaccggaagg aaagtgctag gtgtttttta ggaactaggg
                                                                    1380
                                                                    1440
tggaggggg acgaacttct cttcctcaca tgaggttact gtttctttcc tctgtggggc
                                                                    1500
attggatcct cccacagttg ccctggtgat gacttaggac ttcccatctg tgacatccca
ctttgaatct tgatcgtgac aagaaatacc ttaggccttc agtcaattcc gaagctcctt
                                                                    1560
                                                                    1620
cagttgtttt tataatgggc gtttcacatg cacatatgtg tatgcatgta tacgcccata
cagacatgca cacacagact cctactccat tagctaacat accetecete tecacaacee
                                                                    1680
                                                                    1740
gtgtcacata cctttcagga ggtgacagtt gtcttagttg tcatctaccc agacaaacgt
                                                                    1800
cctgggcccg tcctccctcc tgatactgta gcctcttggt acccagggtg agttggtgga
gaacagagag atgagaagca gagggcttgg ggaaagcctg ttcctctctg actcagccct
                                                                    1860
ttttggcatt attgcaagag cttgactcct ggttgccttt tcccagccag ttttcagttg
                                                                    1920
                                                                    1980
gggtgaaggt ttctgcaagt gtgaggtcca gatgctgctg ctcatgttgg gctttccttt
                                                                    2040
tgggaactat ttctctttat ttatagtgtc gggcttccgg ggaaagcaat cattggtgtg
```

2100

tatgtgtatg tgccatgcac acacgtgcat atatacacat ttgtgtatgt ggaaatgtgc

tgggcaagtc aaaactatag	aagagttgcc	tcctgtctct	cgaatcttcc	agagatatca	2160
cttaattgtt aacagctttt	gtgttaatcc	ccttcatccc	ctagcacttt	tattctacca	2220
cggctggaga gttgananct					2280
ttatttttcc tgtctctgtc					2340
ttttactccc aatattctgt					2400
cagtaacaaa ccaattgcat					2460
cagctaaaac ccttccccct					2520
ctgttccact gcccctcctc					2580
accatgtcaa gaaattatta					2640
ctggtgcaat gctctggtgg					2700
acccacctcc atggacacct					2760
cttttcccca gtatagtgga					2820
catttgtgtt cagtctgaat					2880
ctccctactt tcag					2894
_					
<210> 16 <211> 3076					
<212> DNA <213> Homo sapiens					
<400> 16			taggtaggta	taagaataa	60
gaattcaaaa tgtcttcagt					120
aagtgcttct aattaaaata					180
tttaaaatag ccatcttaga					240
ttaggtcttg tgctttttt					300
aacatattct gaatattttt					360
gaagcttcat gagtcacaca					420
gtagcctgga gaagttgacc					480
cttaatacac atcactcttc					540
atcatgttta cattgtatgt					600
aaaatgtatc agtataggat					660
aaataataaa aaattttca					720
agccatgcac aaaactacct cattatgaac atagtagaaa					780
gtttgaactg aaatacgact					840
tectgetggg gtteetgtet					900
tgtgaatgac aaggtcaaat					960
agacagtcct actgaaaagc	ataaaaaatt	gtatectage	tacagattca	ttcagagtct	1020
aaattccgtt aacaacttgg					1080
ttccacacac tcattacttc					1140
aaactctcca tcaaatcctg					1200
aagttcctac cactgtgcaa					1260
gccattgact tttctgtcgc					1320
tggagacaga gtggcttgct					1380
taatgctatg tcagaacacc					1440
tcaagacact tcaagataca					1500
taaaacattc tttaactggc					1560
gggtttttat tatgtgggta					1620
caggtgttgg gaatctggag					1680
tgagtacttg ataagaatta					1740
tcatctactt gaacagctgc					1800
ccacccaccc gaacagecge			JJ J J	5 5 5 5	

```
atcaattatc cattttgaac ctggagaaga ccattcagaa gatgcaatca tgatgaatac
                                                                     1860
                                                                     1920
tcctgtgatt aatgctgccg tggaaatggg ctttagtaga agcctggtaa aacagacagt
tcaaagaaaa atcctagcaa ctggagagaa ttatagacta gtcaatgatc ttgtgttaga
                                                                     1980
                                                                     2040
cttactcaat gcagaagatg aaataaggga agaggagaga gaaagagcaa ctgaggaaaa
agaatcaaat gatttattat taatcoggaa gaatagaatg gcactttttc aacatttgac
                                                                     2100
                                                                     2160
ttgtgtaatt ccaatcctgg atagtctact aactgccgga attattaatg aacaagaaca
                                                                     2220
tgatgttatt aaacagaaga cacagacgtc tttacaagca agagaactga ttgatacgat
                                                                     2280
tttagtaaaa ggaaatattg cagccactgt attcagaaac tctctgcaag aagctgaagc
                                                                     2340
tgtgttatat gagcatttat ttgtgcaaca ggacataaaa tatattccca cagaagatgt
ttcagatcta ccagtggaag aacaattgcg gagactacaa gaagaaagaa catgtaaagt
                                                                     2400
gtgtatggac aaagaagtgt ccatagtgtt tattccttgt ggtcatctag tagtatgcaa
                                                                     2460
agattgtgct ccttctttaa gaaagtgtcc tatttgtagg agtacaatca agggtacagt
                                                                     2520
togtacattt otttoatgaa gaagaaccaa aacatcatot aaactttaga attaatttat
                                                                     2580
taaatgtatt ataactttaa cttttatcct aatttggttt ccttaaaatt tttatttatt
                                                                     2640
tacaactcaa aaaacattgt tttgtgtaac atatttatat atgtatctaa accatatgaa
                                                                     2700
                                                                     2760
catatatttt ttagaaacta agagaatgat aggcttttgt tcttatgaac gaaaaagagg
                                                                     2820
tagcactaca aacacaatat tcaatcaaaa tttcagcatt attgaaattg taagtgaagt
                                                                     2880
aaaacttaag atatttgagt taacctttaa gaattttaaa tattttggca ttgtactaat
acctggtttt ttttttgttt tgtttttttg tacagacagg gcagcatact gagacctgc
                                                                     2940
                                                                     3000
ctttaaaaac aaacaqaaca aaaacaaaac accagggaca catttctctg tcttttttga
tcagtgtcct atacatcgaa ggtgtgcata tatgttgaat gacattttag ggacatggtg
                                                                     3060
tttttataaa gaattc
                                                                     3076
      17
1412
DNA
Homo sapiens
                                                                       60
qaaqaqacaq tttatcttct gagccgaatg ggtaatagcc gaagtgccct gaagatgatt
                                                                      120
atggaggaat tacatgatgt tgataaagca atcgaatttg ccaaggagca agatgatgga
gagetgtggg aagatttgat tttatattcc attgacaaac caccatttat tactggcttg
                                                                      180
ttaaacaaca ttqqcacaca tqttqaccca attctactqa ttcaccqtat taaggaagga
                                                                      240
atggagatcc ccaatttgag agattccttg gttaaaattc tgcaagacta caatttgcaa
                                                                      300
attetgette gtgaaggetg caagaagatt etegtagetg actetttgte ettactgaag
                                                                      360
aaaatgcacc gaactcaaat gaaaggtgtt cttgttgatg aggagaacat ctgtgagtcg
                                                                      420
                                                                      480
tgcctttccc ctattcttcc atcagaataa cccagtggag agaagtgttg tggcttccat
                                                                      540
cctgctcagt ggaatgctgg tgctgccatt gcttagagct gaggttctca agctctagga
                                                                      600
tgcagctaag cccttcagcg tggtggtctt ccattgccgg cacatgttcc acaaggagtg
cctgcccatg cccagcatga actctgctgc acagttctgc aacatctgca gtgctaagaa
                                                                      660
ccgtggacca ggaagtgcaa ttttggagat gaaaaaatag ctcatttctc cttgtcagtc
                                                                      720
tccttgtcac cactcttttt gagactgttt ttgcaacaac aaaagcattt gttgacactc
                                                                      780
```

840 900

960

1020

1080

1140 1200

1260

1320

gtgctgttaa gagatttgtt tatgtttata ttatactcaa aaacaatttc ttcatctatt

cctgtactaa tggtttctct ttgcagttca cagagaattt ggggctctct tcatgccttg

aaattttggg gtccatagtg aatattttgt tatttatttg tttggctcat tctttatata gtaatggaaa cataagtcta ggagttagaa atgaattttt tagacettag taaaaccatt

taaccataaa atggacaact gagaattctc ccagctgcct gaaagcgtcg ccaactgtgg

ttatcctgca agctgctacc tgcaacttgg acgttgtttc cacgtgctct gctggctacg

attettgeat tetgggtttg getttttet gtgteateaa etatggttat eetetaaata ggeatttaat gaaacattgt acaaattgte aeteatttga tgacacetgg gaataacatt

agcaggetga tgteetgeae cattatgttt actaateaea tgttetgtgt getgtgaega

ctgtcaaaga gtatctggcc atggcggaca ctcagcattt gttgattgaa taaatgttag ctcttctcaa aaaaaaaaaa	1380 1412
<210> 18 <211> 470 <212> DNA	
<213> Homo sapiens	
<400> 18 cgaaaaaagg aacaaagcgt tactgaaaag aaggtaacct ttgttggatg tgggccttag	60
ctccaggtcc agactactac tctatgttct ccagaagggt gctaagtcac ctactgaaga	120
gagaaccaac tgactttcct attgactcat caggaaccag tcctcagtct ggtcaagttg	180
tttcttattt gtgagcagtt caggctatct cctgatgggg atgaggccaa ggctttctta	240
tcttttggtt gtctctgctt aatggaggag cctggcctag gatggaggcc tggcttagat	300
ctttcattcc acctcaggaa tgaggttgtg atctttcctg tcctgaccct ctctgaatta	360
tgtttcaata gtactcttga ttgtctgcca tgttgttgaa gcaaatgaat tatttttaaa	420
tgttaagtaa gtaaataaac cttagcccgt caaaaaaaaa aaaaaaaaaa	470
<210> 19 <211> 738 <212> DNA <213> Homo sapiens	
<400> 19 aatacagege atteaacttg caaacaceet tecaeteeca caaagageaa getgteactg	60
gccaatcaaa acaatgaacc ataatgaaac agtttttctt gctccaccca ctcggtgacc	120
aaatttgaaa aaaaaaaaa accgcgccaa ctcatgttgt tttcaatcag gtccgccaag	180
tttgtattta aggaactgtt tcagttcata ccttccactg cgataggaat catgtctggt	240
cgcggcaaag gcggaaaagg cttggggaag ggtggtgcta agcgccatcg taaggtgctc	300
cgggataaca tccagggcat tacaaaaccg gctatccgcc gtttggctcg gcgcggtggg	360
gtcaagcgca tttccggtct tatctatgag gagactcgag gtgtgcttaa ggttttctta	420
gagaacgtta ttcgagacgc cgtcacctat acggagcacg ccaagcgcaa aactgtcaca	480
gccatggatg tagtatatgc cctaaaacgt caggggcgca ctctgtatgg cttcggcggc	540
tgaatctaag aatacgcggt ctcctgagaa cttcaaaaaa caaaaaaacc caaaggccct	600
tttcagggcc gctcacaaag tcgtttaaag agctgaaatg cgttgcgaga atgagtttgg	660
atgacagaaa taaccgtgac agcctgcata agaatgaatt gtgtttgcca tgaccggcca	720
cactgtgaca aaatttca	738
<210> 20 <211> 446 <212> DNA <213> Homo sapiens	
<400> 20 aactgaggca tcatggcagt ttaatagtga ggtatttaat tgcattttta taaaaaacat	60
tgcaaaacaa agtgacaata gggacctaaa ttctttggac ttacggtaga gatgcttgag	120
gatcctaata ttctacttct gccaacatgt caggtaggaa gctcacaatg ttccccataa	180
gccattacaa actggctaag gaaaatcagt catgactaag tccttgtctg catcacgctc	240
ctgccctcc acacactgtc tgagcgtgca cttttctttc gaaggctaat ttatgaggca	300
ttctgcctga gtcagggcta ttgctaagtg gaaggtttga tgaacctccc agtagaaaat	360
gcaaggcctg caaaaatgcc gaacagctcc gatttactat gggcttataa tcaagggcaa	420
actatacaat aagagggttg gtattt	446
<210> 21 <211> 442 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 21	

ggtgttccct gagcggttgc tgcgggtgat ggatactctt ctgatactgg ctcttcgtgc	60
tataatttet ttteteacea agageaggtg eeettteaga agggaatggg antngaggga	120
gggtcacaga aacacctcgg cactggggga aacgtggcct agcctctgng ancggcganc	180
ageggeegga anactggtgg getgegggee ggegegggtt cannaggett etttteege	240
ggacggagac actngtacag cccaagtctc gagnaaacgc caacgccgac gccttctcca	300
acaaaagatg gcctcggact caagagtgcg gctccagggc aatgcagccc caacctaaag	360
atttagaggc ctcccgtttc gctggccccc agagccgncc accgcgactg cacttcccca	420
ncgataaaag gtggtttcca an	442
<210> 22 <211> 413	
<212> DNA ,	
<del>-</del>	
<400> 22 tacagagaat ataaaaatac attcacttta ttttagaaaa atgaagactc atagagtaag	60
cttatcacaa actggcctat taggagtcac agaattcaca ggaaacaatt tctgaagacc	120
aggtgcctgc tgccacctct ccaagcaggc cagagtccag tagagaatgc gattcaggaa	180
gatggctcct cagagggcag ggaggttagc tacggaggcc gctcacgtgg aaatgtccag	240
tgaaccaatg ccaaggaaga agataaaatt ctctggggct gaccacaaca gtgggggtgg	300
ataaagacaa accacttgcc tgtacttctc atcttctatt tgttcatttc actgctggaa	360
ggtgacctct tttcccctaa tcttctttca acccagagag tttaagtctt ctc	413
<210> 23 <211> 388 <212> DNA .	
<212> DNA .	
<213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 23	60
adattatac gaangattta ttgatactgg ttaacatcca ttatatacag gtagaaactt	120
tcaaaattgt acaaagaacc attaagcata ttgataaaga cagttttaca gacaaaacaa	
ctggaaaata gttttaacat acacaatata taattatgaa aaaaatgtag aacacatatt	180
gttctaccag ataaatccca aggttattaa aagtctgcta tgcagacctt taagttgaaa	240
aatgtgttca atggagttac atggttttag aaaattaagt ataatgttaa aattaagctt	300
ttttttctca ttgcaatttg ggagaggaac tgagacaact tttttacccc aaatctatac	360
agtttgaaaa ataatttata tgtctagc	388
<210> 24	
$\langle \bar{2}\bar{1}1 \rangle = \bar{4}\bar{1}5$	
<212> DNA <213> Homo sapiens	
<400> 24 ttcttgcttt ctttaaatct ttatttaaaa gtccatgcta ataatgtgtt tacattttta	60
	120
cagttacatt atgatagaaa ctgttggatt ttttaaatat ctaaaacaat ggcccactga	180
agaaaggaac aattaactct ttaattaatt ccttaggata aatacccaga aatttaacag	240
ctagggcaga cttctaatac aataccgaaa gtccttccaa aaaccaagtg gttgccaact	300
tatgtccctt agcattataa cattcttgag ccaatagtgt aaaaatacgc tgacaatttt	360
ataggcaaac attactcaag gtatcttact ttccacttat tactaaaggt aattaacccc	415
taaatagatg ctcctcaaca gtgggactac atcctggtaa acctatcata agttg	413
<210> 25	
<210> 25 <211> 637 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<220> <221> misc feature	
<221> misc feature <223> n=a,t,g or c	

<400> 25		~~~~~+++~ <i>~</i>	2022022404	+++α>αααα	60
gaattgtgaa gctgtttatc					120
caaaaaataa tgtgcctaag					180
tatacaaaat tgattttctt					240
aaaccacaac acttattttg					300
tatataagag tcatggaaaa					360
atggcctctg attctgtctc					420
gcttaggaag atgtaggctc					480
caggetttte catteaaact					
acactggaaa tccctgtttg					540
ctgtccaggt atagatttta			attagtcaag	gnecaattgt	600
gggcttcncc tacacatttt	ataaatggta	tecetee			637
<210> 26 <211> 261 <212> DNA					
<212> DNA <213> Homo sapiens					
-100> 26	++-++ <i>aa</i> a <i>a</i> a	agaggtatta	aaatocacac	tacacaatta	60
gagggaaaga caaaacgtat cctgttgtta tcagcaccag					120
					180
ctgctgcgtg gctgctgtga					240
cagttggtga ggttttctac		aagggateet	taattataaa	cccacggcac	261
gcagagaaga ggacagaatc	L				201
<210> 27 <211> 445					
<212> DNA <213> Homo sapiens					
-400> 27					
ttttttatt gttttatagt	tttattttt	ttaaatgaca	gttacaagtg	cttttccctt	60
gatgggcaat gacgtaacta	ttttcagtta	ttagtaatgc	cttaaaaagt	aacagcattt	120
tgtctaaact gaacttatat	aattgcacaa	aagtcatgga	aagcattaag	aaatgctggt	180
aaagattgaa gttttctcag	attcttgcgc	aattccaaga	agccttgatt	ccagtgggtc	240
ctctgattca aacaataatg	atgctcaaac	tcagtgacac	acaggtagag	aacagcagca	300
caaccaggag aacccatgtg	gtttgtaaca	gtgaaattct	gctctactgt	taaggtttaa	360
tgatgcattc attcatcttt	tcattaggag	cataaaaaac	acctcaaatt	atattttctc	420
aggcttaaaa cttgttttga	gctat				445
<210> 28					
<211> 444 <212> DNA					
<213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<223> n=a,t,g or c					
<400> 28 tacaaaaaac aattgttatt	tatatacttt	taaaacctca	cagtaatatt	ttcacactac	60
cttcttggct gaaagttcac					120
teceettget eteteettgg					180
tatccatccc ctcagtagct					240
actccatgtc tgactgcaag					300
ttattgctaa tctgtaaaac					360
aaatgacttt tgcctaaact					420
tagcacacct ctcaaataag		Jeacaacega	-50000000		444
Layeacacci Cicaaacaag	aayy				
<210> 29 <211> 451					
<212> DNA					

040 Hama moniona	
<213> Homo sapiens	
<400> 29 ttcatatttc aagtgttttt attctgagca gtaggtacaa aaaataatga catagttgtg	60
tctaattctg tatagttcag caccctccac aggctgtcaa tctctgattt gatctacttt	120
taccagattt aacagatect tgaatttact ttactgtata tacttectte ttgeteacat	180
tgggaatcaa actaatgctg gaaacatgca tcttcagact tcattgagga attccagatt	240
gagacacgct gggatgtgga ttgagtccat ggttagagaa gatggattaa atggaaacaa	300
aacaggaaac atgtgcttgg catctaatag cagttgctga gggtcattcc gctcttgtag	360
ttgtgcctgg attgttcgta taaaggccac tgttacccgt tcttcaaatt cattcagggg	420
agtataaagg tttaaaattt tgacaatctg c	451
<210> 30 <211> 466	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<220>	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 30 gagcacaaag gtccacttta cttacatgaa ggaacataaa ggcatgagaa acagtcatct</pre>	60
caataaatgc aagacatgag cataaaagag gttctctgcc tttccagcgt tgttattaca	120
gagagaaacc tacaattatt ttgttaaaca aaattcaagg ctccaggact catctctgga	180
gctgatatgt cttaaatact attatagtag gaaagggaga ggagaaaatt ccccacccac	240
tcccccgatt tggcccgtgt agcttccctt tgagggtgtg tgacttgcca tctgcaaaag	300
tcatggccaa aacaggaact aacaggccaa actaccatca atctagtctt ctacagcacc	360
ctaacagagt gccagggtcc tctgtcncct ccgcacctga ggncaaagtt ccaggaagtt	420
tactgccggt gttaggaggt gagctcaagt tcagtgtctg ncttct	466
<210> 31 <211> 418	
<212> DNA <213> Homo sapiens	
400- 21	60
gtggttttaa tctgtgtttt gagatttttt tcaaatggaa agatattaca gatagaaaca	120
catcattcta ggtttcaaaa tcaccaaagt cagtgagaag aatgtacatt catttaaatg	180
taatcatttg taaataaaga aatcttgaaa aggctgaaca gttcaatcaa attgaagaat	240
tgatctagat ttttcattat tctttttaaa taatgagtaa gtgtagatat agtgtacata	300
caagttgaca ttctgattca ttcaaaatag tcacatccct ttgcttggtt ttggatgttc	360
cagagactaa aatttaatac cattcataac atagtatttt cagtaaaaag aattatagag	418
caatgaaaaa tcagaagatg gctcagagag ctttataatc tctaaatata cacacatt	
<210> 32 <211> 418	
<212> DNA	
<400> 32 tttttacaat tccataccac caccacatct gttctgtgct tttattttac gaaaaagcta	60
atggcaaatc tacattaaac taagttgaat acaaagtctt agtgaagaag gcctggtggt	120
ctcgtttaca aaaatggcca gtgtcatatt tgggcttaaa atttcaagaa gggcacttca	180
aatggctttg catttgcatg tttcagtgct agagcgtagg aatagaccct ggcgtccact	240
gtgagatgtt cttcagctac cagagcatca agtctctgca gcaggtcatt cttgggtaaa	300
gaaatgactt ccacaaactc tccatcccct ggctttggct tcggccttgc gttttcggca	360
tcatctccgt taatggtgac tgtcacgatg tgtatagtac agtttgacaa gcctgggt	418
<210> 33 <211> 446	
<212> DNA <213> Homo sapiens	

```
<400> 33
tctgaaaatc agccttttaa tctagttgaa cccaacgagt ggggaaagaa ctaaaacatt
                                                                     60
tttttccctt cagattttga ttataagaat aacgggtcag aggtgtctct tccataggaa
                                                                    120
180
240
ctctacaggc acacatattc acacaccaaa gggactcctt cctgtaactg gggaacagaa
                                                                    300
tgtaaaaaaa tccatccaag tggccaccga taccagaaat aaccaaatgc atttacactc
                                                                    360
acaacatcag tcaactcaca tgcacaagga gaagcgtctc caatcggagc ttagagccaa
                                                                    420
                                                                    446
aaattacaaa tggcagagac ttgagc
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 34 ttttaaqtcc tcacaacagt gattttatta aattagttgc tttataaaac attgcagatg
                                                                     60
tcataattgt taacataaca atttaccaaa ctgtagttaa ctggtgcagt ttgctgagca
                                                                    120
tgttttataa aggaaaggaa aggaaatgcc aaaaccctgg taaagttgtt ccattgcagc
                                                                    180
ctaagagaac aaagatttgt ttctcagaca cttaaatcag gcaaataaaa ataagtttcc
                                                                    240
ctccccacc tgaagcagtt catcagtaga aatagcctga taaataacta gacagtcttt
                                                                    300
gcactcgaga gattccacaa catgtaatgc aataatggaa aggtttacct tctttagctt
                                                                    360
caaagttgga gggttttggt cattttaatt ttatatcaaa ctagtgcttt tcagccgcag
                                                                     420
tatetteact etgagataag eagtettett eeacaatgga attittnata teeccatggt
                                                                     480
ccatttttaa gaccaagcca attttaatac naggtgcccc ccacatggcc ctggctgcaa
                                                                     540
                                                                     581
acngcttttc ctggaccagn tttgaagtag ttccaggngg g
       35
465
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 35
ttttttttt ttttttcta aatgaagtgc ttttaatttt cagaccaaac atttttaata
                                                                      60
taaaaacatt ttgataatat acaaacagca atcacaacag catccacatg gcagcaaggg
                                                                     120
gaccagggca cagagngggg gagcgggctg gggagggaca gttttcaggg tcccagttgc
                                                                     180
ttccctggct tgaaatcacc ctggtcctag cagaggacag gttaaggctg ccagaggang
                                                                     240
ngggtccctg acctgggccc ggagacagac tgcccaggca ggccctctga taccatcttc
                                                                     300
caaccatggc agcctccagg aaaagccaga tccatttagg agataacagg aaggtggctg
                                                                     360
 tgattgacag gaaaggcaac atggttcctc agcatcctgc tgatcacacc tctgggaggg
                                                                     420
                                                                     465
gctgctggat tgaagaggac ctaagaatct tcctgggagc aggac
       36
382
DNA
Homo sapiens
 <400> 36 tacatgtata ttatttattg ttgattctgt acaccaaatg gattacaagc agcatccagc
                                                                      60
                                                                     120
 agaagacaga ccccccaacc ctgcccacca gggtcgacac tctacaaaac cctgagggcc
                                                                     180
 tagaaatctg taaatgcatc gccaagcact ggggctgatt tgcagtaatt ctctaagcaa
                                                                     240
 ggcaaacatg atctagcttt gaaggcagca tgaaggcagc gggttggtga gaacaatctc
                                                                     300
 teettaagag aagaagatae etggggegga aggagtttte eeeggaagtg gettgeagee
 caccetetet gaaccacage catggettee tteecaagge caetgetgge tteecaacaa
                                                                     360
```

cgcagattca gttctgactg tg	382
<210> 37 <211> 323 <212> DNA <213> Homo sapiens	
<400> 37 cttcacacag taagatcagt gtttgctaag tgttatcagc caatgtacag cacccccaa	60
caccgtcaaa cgttgttcca gttattttac tttaaaagag gatttaaata atgcgacgtg	120
ctttccactg agccactaag taggtgtgga cgcacaacct tcaacactaa ttgcccttta	180
ctaagccgac cagggctaga cactaagcca gaaaagcctt ttccagagtt tcctcttccg	240
cacaaaagct ttccttctgt cactccaccc aaccacccag ctcctccctt aagtgtttga	300
	323
aagataattc tataagtctc ctc	
<210> 38 <211> 416 <212> DNA <213> Homo sapiens	
<400> 38 ttttttttt caagtatatt tactettat tgeatteett catttgeatt aaacaatatt	60
ttttcaatac agttttggac aaaacacaaa gacattaagc tcatttaaca agagacataa	120
gttaacacaa tgtgtgctgc tttcatgagg aggaaagagg caagatctta gaggaatcca	180
ggatactggc caccaggaat cacaggatct cacaatacaa tccacttctt taaaagccac	240
aaaataagct agggaagaaa acccaaaaca aagaagatat gacatccaag tctccaccaa	300
aagtatacaa atggcaagat ttggagatga tctgctttct cacatgagga caaataacag	360
aggagccaca cccaagtgcc actgtggcca caagcctcat gggtggcgtg tgaggt	416
<210> 39 <211> 427 <212> DNA <213> Homo sapiens	
tottatttaa aatattttaa tttotaaaaa gottaaatoa tattaaaaatt taaacaattt	60
cattgtacag tacttgacaa tacatttcaa caaactgaaa ggcaaaccag taaatcagtt	120
ttgcttactt tctaagctta ataatgtaca gactcttgct cttcaagaag atgcaaaaat	180
cagcaacagt acaagtgaaa tatttaaata ggaatctgaa acaaaacgaa ttcaatctga	240
tcaaatccac aattaattga agttttcatt ttattcaatt gtgaataaaa tagcagacac	300
tgtttcatcc aataagccaa tgatatcagc ttaggagaaa tgatctgcct ggcttgtgca	360
agacaagaac agttaccttc tgctgaaagg atgtgagttt tcaaatttgg ttttcatgtc	420
atagttt	427
<210> 40 <211> 275 <212> DNA <213> Homo sapiens	
<400> 40 ttcaaatgtc acatttaatg ttttcaccac tgtacttcaa atctacattg tacaaagtga	60
ccagaaagtg tgccacggta attgaccaac ctctgagatt gtacctttca caccagtgtc	120
ttcttgggct cttttgatac taaacacgtt tctcattcaa gtgaattgaa atgcttcagt	180
tgggttgatt ctcaggagcc tcataaaaaa aaaacaaaga tattgcacca tctttgttta	240
gtaattcaat gtttgtttct ttcacagcaa ataat	275
<210> 41 <211> 366 <212> DNA <213> Homo sapiens	
<400> 41 tttttcata atgatttatt tagataacaa acattaatgt gaaacataca ggctattggc	60
aaccactatt ctaaaattat gtaagtacaa ataaacatac tgaaatgtgt gcaattctaa	120
gtttttaaac cagaagattt ctacactaac acacatttat attaatgaca cataaaaaaa	180

ataaaaactt tattacaaaa ataagttaca ctcgcctcca gcttacagta taaaacaatt ttatttgcag gaatgcaaaa tgattgtttg ccatgagcat tttgaacata tgacatgtcc	240 300
gattttcttg ttaaatttgc atttactggg gaactggtgt gtataaaacc ttaattaagt ataagc	360 366
<210> 42 <211> 272 <212> DNA <213> Homo sapiens	
<400> 42 acatagaaaa aaatgtatat ttatatccct aaaaggcaat acagaattta taaccaaacc	60
atgtgtgaga actgttaaat tacattccaa ataccagcag tggaacaaac agaaacacag	120
agatgtttta aaaaacatgc agcacgttac aaagaggccg tgtaataatt cacaactttt	180
gttagcagcc gttaagtttg attagtatta agcagcaatg gtttaagcaa ttttaaatca	240
tgatatgata gttacatata tgcattttac tg	272
<210> 43 <211> 337 <212> DNA <213> Homo sapiens	
<400> 43 ttttttaaa attaatcaac caacacccat tctatttaag gttccaaaag gaagtagctg	60
gacceggetg cagacacact eccacettge ttetgteeca aaagtacate ecctaegtgt	120
ggttctcctt aaacaatttt aatgtctggg ttggggaagc aggtagagcg cgtagaggca	180
gctgctagag gctggttgct gactccaggc cgcgttccag gaaatatcgg tgggaagaac	240
ggggacgggc ttgggaccct tcattgagga agtaggatgt gatcttcctg agtccctcct	300
gattctcgga tgctgagtcc tcccatataa catcttc	337
<210> 44 <211> 423 <212> DNA <213> Homo sapiens	
<400> 44 acattcagat gtttttactg cttgattaca tttcttggtt tcacatttaa gacttcaatt	60
tataagaagt aaattatatg tttttcaatt taagaacaga tgaatgcagg aacattatga	120
acattatgtt ggggaaaaca aagagacccc aaattaaaaa acaaaacaaa	180
actagttgtg cagctctgga gaacttaata aaaagtaaat caacttttaa atcagttaac	240
tttggcgtct gaatacaaaa tgtttatcag tattacctat gtagatgact attaagggat	300
gtgcagcatt ttcaaaatcc ctgtgtgtcc tttgtatgca tgtttggtac actgagttct	360
gtggtcactg tcctctcttc agcagggttt ttttacccca gtacgattgt ccatctctgt	420
att	423
<210> 45 <211> 408 <212> DNA <213> Homo sapiens	
<400> 45 gattgtattc aaatttttat tttttgaaca aaaatttaag acaatgattt taaataataa	60
aacatggtat atattctaga cactggtttt ttttaaagat ttattaaatt tagactccta	120
tagttctgtt gtgatgcttt cttcaacatt tatattattt cttaccattt tatcatcact	180
ccaagcttgc taaacaaaga atctctctgt taagtgaagt tttacattaa ggaaatactc	240
cactagcaca ctgaacaaac ctacagaact gtcctagttt atatttacaa aacacaagaa	300
gtctgtccag ccattttggt tttgttgtta cactgtccat actgagatca gcagagagct	360
aagtaataca caagattacg cttcggcagt gcaaaggatg gcatcaac	408
<210> 46 <211> 369 <212> DNA <213> Homo sapiens	

<pre>&lt;400&gt; 46 gcaggtaatc ttatttcct aagggtagtt tcatgatgac agtgtcaaaa aattactgtg gataaagaaa aaattgtctc aatgaaatag aatttttcac tgaacacaga aaccatctca atagttgctg ctccctggtt tccaggccac gcaacagaca tcaaaccagg aagccaaact ttcatggacc tgtgttaaga aaaacacaca tacatgggca tactactttt tccagaaaaa cggaattagg cagagaagga agtgtgggtg tacaactgat ccacaagcta ttgggaaatc aatagctaaa aaatgtcaac accctggctt ccttttatca ggaactccag gaggctgaag gaatgtgag</pre>	60 120 180 240 300 360 369
<210> 47 <211> 362 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 47 gttaccaatc tgaagtggga gcggccgca ttttttttt ttttttttt tttttaaagt ccatagattt taatgaaatt tctattcctg tctctgagcg gctgctgtgc tttgtctggg tcccccaggg gacaagagtc aggctggaat gagacctctg tctgccaggc ctttgtggag gcctgggagg agaaaggcca aaggctttga tgcttgggac cgatgcccgg ccactcagct ccagacacca gggatctggc aaggggtgg ggcaagggcc agacagacca acagccttgg ggtcctggcg agactcgcca agaccagatc tgaagctggc tgggccaaag cagctgaggc gg</pre>	60 120 180 240 300 360 362
<210> 48 <211> 394 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 48 caagatagag ggttttatt gaaagtaggt tatgcaaact tggcttgaaa ggtacttatc attttaaaaa ttatgcctaa tgatgcatca aatacaaaaa catataatac atcaatagtc aaccctttcc ccataaaggc aaagttactg agaaatgttt atttttcctc tggtaatggc taatccaggt aataatatga aagcaaatgg aaaattcaca ttgcttcttt cattgcttct gtcccttaaa cctgttaatc tttcagaacc acattactga ggtgctggcc tgtgcatgga aacccaatga tatccaggtc ttacaggtcc agggcccagt ggacagacag gccctggtcc tccacgctgg ccaccatgtc ttcgatggca ttcc</pre>	60 120 180 240 300 360 394
<210> 49 <211> 385 <212> DNA <213> Homo sapiens	
tgtgatgcag catcaggtgc ttttacttca gtgaatgaaa aataatggtc acaactcaaa tgaatgggaa tttaatatga atatatgcac cttaccagag atgtttgcta ccaatgatat cttagcaatt ccatattcct tacaaagtca gtataattgt tgtaaaaaaaa tcaactgtgg ttctgaatac ccattcacag ttgacctcaa caatgtatct gatgtaggag actgagtatc cgtgacaggc agaagcatgt gatggtcctc agtcccaagt ggaagagcta atggtaaagt catatcagaa ggcttcacat ccatagtttc tgataaagga cttttttgta tggaatcctg ttcactcaaa gtatgatcct ctgca	60 120 180 240 300 360 385
<210> 50 <211> 500 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 50 ttttggaata ccattgtgtt tattgatcaa acctggcttc gagtgtgaca gagccattct tggttctcct tggaagtaac aagaacactg ggtaacatgt gaagtgcatg gagactcacc tgaatcccac caaagtagta gctggaccca gtagcctagc ttattgtctt ggcagtgccc ctacccagta ccattagacc tggctttgtc ccttacatag gacagactgg gcttctccac tcccgccagg ctggccctac ctccacctgt ccttggaagc tagtatgtaa gtaagggagg</pre>	60 120 180 240 300

agtcatcaag tttatagatg	ggtaggctga	ggattgaggc	aggagggac	ttaatggctg	360
agtccctggc ttgttccaga	gccctggccc	ttgagcccct	ggactggtca	gtgcatggac	420
actctccct cccagctcgg	gcggaagact	tttcctgact	tagctgctcc	atacacacaa	480
tctataaata tgtatttgct					500
<210> 51 <211> 313 <212> DNA <213> Homo sapiens					
<400> 51 actgaaaaac tcagacttta	ttcagattaa	gttcctctac	aaaaagtagg	gttctgtccc	60
atgtgtctct gacacattta	caaaatacca	gttttttaaa	attttggtca	aattatgagt	120
ggttgattta aaaacttttc	caagaagaag	aaaagcatgg	agtagtaatt	taaagaactc	180
aataaaaact tctattttt	attttaaaat	aatatacaca	gtgttatttt	cttcaagacc	240
gtcctgtgga tgtgaaatcc	gtcttcgcgt	catgtatctc	ccatatccag	cagttcagcc	300
atccagctac ctt					313
<210> 52 <211> 207 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c					
<400> 52 gtggaagaat acagaaatat	atttaataat	tagtatgaaa	ataaaaaata	2+2+222++	60
					120
acaaaacttc tttttttca gaagcttccg gtaaataagg					180
acacccctcc accaactgtc		caayacayca	caccyctyte	acaagcycaa	207
<210> 53 <211> 221 <212> DNA <213> Homo sapiens					
<212> DNA	ctgctaggga	accagcatac	atatgtcatt	cctttgtaca	60
<212> DNA <213> Homo sapiens <400> 53			_	_	60 120
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc	ttttgtttac	cctaatttat	ccaactcagg	aataaaaagg	
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga	ttttgtttac gacctccaat	cctaatttat ttctcattct	ccaactcagg cagcttcaaa	aataaaaagg	120
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag	ttttgtttac gacctccaat	cctaatttat ttctcattct	ccaactcagg cagcttcaaa	aataaaaagg	120 180
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga <210> 54 <211> 228 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	ttttgtttac gacctccaat cacaggttgc	cctaatttat ttctcattct tgtgaaataa	ccaactcagg cagcttcaaa g	aataaaaagg acaaattagt	120 180
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga <210> 54 <211> 228 <212> DNA <213> Homo sapiens <220> <220> <221> misc feature <223> n=a,t,g or c	ttttgtttac gacctccaat cacaggttgc tggctttggc	cctaatttat ttctcattct tgtgaaataa tttatagcac	ccaactcagg cagcttcaaa g	aataaaaagg acaaattagt	120 180 221
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga <210> 54 <211> 228 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 54 gaaaagaaat ctattttaa aaaggcacac agtcctctct	ttttgtttac gacctccaat cacaggttgc tggctttggc tctgccccac	cctaatttat ttctcattct tgtgaaataa  tttatagcac ctcctgggtc	ccaactcagg cagcttcaaa g gaagcaggca cttaaaatcg	aataaaaagg acaaattagt cccnctcgtt agtcctgagt	120 180 221
<212> DNA   <213> Homo sapiens   <400> 53   aaagcgctga tggaattacc   gtatttttac aagtatttga   aatctcagat ctatgagaag   cagtttaaca ttagtcaaga   <210> 54   <211> 228   <212> DNA   <213> Homo sapiens   <220>   <221> misc feature   <220> misc feature   <221> n=a,t,g or c   <400> 54   gaaaagaaat ctattttaa   aaaggcacac agtcctctct   tccagagggg tcactgcaag	ttttgtttac gacctccaat cacaggttgc  tggctttggc tctgcccac gcagcaggga	cctaatttat ttctcattct tgtgaaataa  tttatagcac ctcctgggtc agggagaggg	ccaactcagg cagcttcaaa g gaagcaggca cttaaaatcg tcacagtttc	aataaaaagg acaaattagt cccnctcgtt agtcctgagt	120 180 221 60 120
<212> DNA <213> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga <210> 54 <211> 228 <211> DNA <213> Homo sapiens <220> misc feature <221> cagaaagaaat ctattttaa aaaggcacac agtcctctct tccagagggg tcactgcaag tatcagacac ccagggccaa <210> 55 <211> 536 <212> DNA <213> Homo sapiens	ttttgtttac gacctccaat cacaggttgc  tggctttggc tctgcccac gcagcaggga	cctaatttat ttctcattct tgtgaaataa  tttatagcac ctcctgggtc agggagaggg	ccaactcagg cagcttcaaa g gaagcaggca cttaaaatcg tcacagtttc	aataaaaagg acaaattagt cccnctcgtt agtcctgagt	120 180 221 60 120 180
<2112> DNA <2113> Homo sapiens <400> 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga  <210> 54 <211> 228 <212> DNA <211> 228 <212> DNA <213> Homo sapiens <220> misc feature <221> m=a,t,g or c <400> 54 gaaaagaaat ctattttaa aaaggcacac agtcctctc tccagagggg tcactgcaag tatcagacac ccagggccaa <210> 55 <211> 536 <212> DNA	ttttgtttac gacctccaat cacaggttgc  tggctttggc tctgcccac gcagcaggga ggcccagact	cctaatttat ttctcattct tgtgaaataa  tttatagcac ctcctgggtc agggagaggg ggcctctgaa	ccaactcagg cagcttcaaa g gaagcaggca cttaaaatcg tcacagtttc gctaaagg	aataaaaagg acaaattagt cccnctcgtt agtcctgagt actctgtgag	120 180 221 60 120 180
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 53 aaagcgctga tggaattacc gtatttttac aagtatttga aatctcagat ctatgagaag cagtttaaca ttagtcaaga  &lt;210&gt; 54 &lt;211&gt; 228 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;400&gt; 54 gaaaagaaat ctattttaa aaaggcacac agtcctctct tccagagggg tcactgcaag tatcagacac ccagggccaa &lt;210&gt; 55 &lt;211&gt; 536 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 55</pre>	ttttgtttac gacctccaat cacaggttgc  tggctttggc tctgcccac gcagcaggga ggcccagact	cctaatttat ttctcattct tgtgaaataa  tttatagcac ctcctgggtc agggagaggg ggcctctgaa  tgtagaatta	ccaactcagg cagcttcaaa g gaagcaggca cttaaaatcg tcacagtttc gctaaagg	aataaaagg acaaattagt cccnctcgtt agtcctgagt actctgtgag aaatatatta	120 180 221 60 120 180 228

taaaatgaaa tatgctcagg ctgataaaca aacaagatat taaaatggag actgacattg	240
aactacatag tcaacttgaa aaacacaaga agacaatgct cctataaaat gatatattat	300
tggctttaca aagacatact ggtttatgtt tacaactatg ttttattttc aaatggtaaa	360
ggaaaggctt catgttgcta tttgaaagta cttctcaact agccgggcat ggtggcataa	420
ttcctgaagt aggaggatca tccccttgag gccaggaggt ccaggctgca gtgagctgtg	480
attgtgccct gaccatagct tgggtgacag agtgaactct gtctcaaaaa aaaaaa	536
<210> 56 <211> 535	
<212> DNA <213> Homo sapiens	
<400> 56	
titigaaaaa agatcacaga ataattttat ttataatgaa tgttattctc tccagacttc	60
aactcatcag tttactctta taacagagaa tcaatttaaa taacaccatc aaaatggaat	120
gaatataaaa caatctgcta ttacgtatcg atttctttga taggatataa ttatagccaa	180
ttagtcttgc aacacatggt ccatttccag tgaaattctc aataaactgc taggaattac	240
agteetteat attgacattt tattgtaaag tetgetagae gtggetetet tgattgettt	300
ggaagtcagt caaacaaatg ctctgaagaa aaggctgaca ccgcaaaaca acttcatatg	360
aaatctgtcc acaaatggga tagcaatgcc tccagatcct ttggttttta tcagtccctt	420
tggaaagtta attaattgat gattgttccc ttaaaattct attttaaata ggacaatcac	480
tgtctataca gtctgtgcca gcgtccttga ctttcttgct tccactgatt tgttt	535
<210> 57 <211> 378	
<212> DNA .	
•	
<400> 57 gagagcacaa ctccaaatca tcttttatta atataaaaag ggcatattta gcaaaagaca	60
cacagataaa agagtcacta tggctcagga cacaaggcag ggaggtgcca ggcctgtgcc	120
cctgctgggg gagaaggagg ctcgggacaa agtgggagaa gtgctgggaa gggctgagcg	180
gtaggggcca caaaagttcc ggtgggcaac actgtcggca ggtcatgggt gggactcatg	240
gggacetege tgetaaetet tgttgtgggg gggtgteett agtgetgeea eetggaggge	300
cactccttgg ttcctggagg ggacccacca agggacacag gacaggaagc ccaggatggt	360
tagtgcaact cgggatga	378
<210> 58 <211> 225	
<212> DNA <213> Homo sapiens	
<400> 58	
ctccaaggca tttattaact cctgagtgtc acggggccag gggaaggctg gagcaaaacc	60
aagtetetgg gggeggggt eetetetgga teeccaetae teageteece gggeteecea	120
tgcagcccta gagacgggag aagtccagtg tgctgttcaa cttccctcca agtccccaag	180
aaagtgggag gcagtgttcc actccagtgt cgtccagacg aacaa	225
-210. FO	
<210> 59 <211> 357 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 59	
tttctttaac cgtgtggtct ttatttcagt gccagtgtta cagatacaac acaaatgttc	60
cagttagaag gaattcaaac ggaatgccaa ggtccaagcc aggctcaaga aataaaaagg	120
gaggtttgga gtaatagata agatgactcc aatactcact cttcctaagg gcaaaggtac	180
ttttgataca gagtctgatc tttgaaactg gtgaactcct cttccaccca ttaccatagt	240
tcaaacaggc aagttatggg cttaggagca ctttaaaaatt tgtggtggga atagggtcat	300
taataactat gaatatatct tttagaaggt gaccattttg cactttaaag ggaatca	357
<210	
<210> 60 <211> 378	

## DNA Homo sapiens <400> 60 aacataaaaa aataaattta ttttgagtct gaaatactga agaacaagca tacagataaa 60 60 tagtacaaag aacaaaaatt agaacatgag taatgactta agacacaggc atttttctag 120 ctattgcata cagacacatt tttacacaca aacatatttt ttaaaagacat ctctccaaca 180 240 ttctcaaaag gcaagagctg tatttgtgac atttgtaata aatgcaacag cttttgaaac atccaqtttc tttcctaaqt catttgatta aaattcacac aagtgatgat tacctattcc 300 360 attttctqaa aatacgacat acagtcatgt ttcgatcaac aattgaccac atatgacaga 378 gatcctataa gattataa 61 425 DNA Homo sapiens <400> 61 ctgttatgta tctgtgattt tatttcttct ttgggtatag ggttgagggg aaataagttt 60 tgagtgagaa ataaacgttt tagctgaaat tgtatcccag aagtttgaaa taagtagtag 120 aagaggggga aaacaaggga gaagtggtgg ggaagacttg gtagattggg gccttaagta 180 240 accacctcct ttccctctct gcccccatga cttcctgctc caagttacag aagggaagga aaccatttta ctcttttat tctgctcatt aatgatctga aagaagaaga tggggaaaag 300 gggattccac cacaaggctc caaagaacca agagtgcaaa tcagtccatt tcactttcac 360 420 tqtctqaqat aqqqtctcta agaccaggat acaagggtgg aatgtagcta tatggactcg 425 atttq 62 418 DNA Homo sapiens <400> 62 gaaatgtaag tatacagatt ttaatttatt tttaagaata attgtatatt ttaaaaaacag 60 120 qacacqtact qtatqaqtaa acaqcqtqqc taacaccaag tccacactgg taagcttttg agaaccattt acactatqtt qacagtaqta ctgctgcagg cagacagcgg aagaataaat 180 240 aatagtgctt caagaagagt agtgattgag aggataggta aagagggcgc ctcatcgtgg aagctagagc aggaacacct ccccagtagt gacatgtgca aagttccaga tctccacgac 300 360 aaagacagct caacccactg gaacaaacag actcccaatg tggctggcaa ctgcgggggt 418 agaagaactc aggcaaagta ggcacaggaa tgggggagat gagagccaag ggacaaac Homo sapiens <400> 63 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca 60 acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg 120 180 qccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctccttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca 240 ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat 286 64 240 DNA Homo sapiens $^{<400>}$ 64 tactgettte ttgattttat ttcaaaagta cacaaggtea caaaactaga geaagttgtt 60 tttcttaaca aattttgttc ttacaaattt caaaatctgc accattggat atataagcca 120 gaaatcgtac atacaaaatc tgaaactgac actgtcagtt ctatactttg cacacgtgaa 180 240 qtqtcaqaat attttcttca gtagtacagg tgtatttatc actaaaattc acaattaggg

<210> 65 <211> 434 <212> DNA <213> Homo sapiens	
<400> 65 tttgttaaag aatgctttat taatacaaat acacacaaac tctgaagcac taagaaattt	60
aaatatctat gtcacagcaa acaggtggca attcaacatc cagggtcgac agaatgcttg	120
aaggagactg caacagattg gattcccatg gtggagaggg catcttcaca ggtgaagggg	180
ggcccagctg aaacagcttt tcaagctctc tctcctcgtc aaggatcatg agaggcactc	240
cactcaaggg gaggtgcgca atctggtgct cttcaggcag gtcaaaactc tcaaagtcta	300
gaggattgaa gggaaagaat ttttctattt ctggataggc atcatctgag gcaggaacag	360
agetttttge tttaacagte tteteagtea tetttttgge agaaaagett ggetgttttt	420
	434
gtttgagggg teee	151
<210> 66 <211> 337 <212> DNA <213> Homo sapiens	
<400> 66 ttttaaaaat gtaatactgt ttatttaact tcaaaaacat ttcagcattc taaacataca	60
aaaaaataac agaacgttgc gaatcgtgtt taagtacagg aggttcttga actttcattg	120
atgcagtgac tctttgcttt gctgacaatg aagagttcta tagtttgttt aaaaacaaac	180
agtttaaaaa ctaccgcact taaaaaaaaa aaatattctc atgccagctg acccccttt	240
gtccacagct aagatggcag cagaatgcta tgtcactata tacagaaaca agacaacctg	300
aagctaaatg gatgccccct gcagagtcaa caggtcc	337
<210> 67 <211> 374 <212> DNA <213> Homo sapiens	
<400> 67 tttttacaat taagctattt ttatttaaca tgtaatagtc ataaagcaac tccatatatt	60
tagttttctg atatcctaat gtatttccac aaacctttta agtctacaat tttatatagt	120
tttccatcag ggaggcaaga tatatataat ttctttttat atttaactaa aggttttaag	180
agggettagt etetaaatea gtaacaatta gteataaeae eatacaaaea eatttaaata	240
ttcaggaaag aggttgttaa gattattgct tagtcttata aaatggtgaa ttttaaccaa	300
attgatacct ctgtaatctt atttatgttt cctataacat catactgctt ggcaagtaat	360
gtaagttttg acat	374
<210> 68 <211> 277 <212> DNA <213> Homo sapiens	
<400> 68 ttttggtaat taacataatt tattacgcaa aaaatgagaa aatatacagc aggagggatg	60
aggagtacac ataggaaatt tctgtgattt tcttcatttt gatcgtattg ctttcttgtc	120
ttcaggaggg aagatttcga cttcaaaagt aacaaaatat ttaagaagag aattcacatc	180
tttctgttct aactggtatt cttgcattta ttttctcagc agtccaggtt tctgggaaaa	240
gcttatgatt attgagaagt gtcaatgctt ctacaat	277
<210> 69 <211> 463 <212> DNA <213> Homo sapiens <400> 69	60
gagtteteat tagaetgggt tetaggeggg etgeteeage tecataagga ageaetegat	60
gtcgtcatag aggctgttgg cgctggacag gcagaggctg aggctgctgc tatccaggga	120
agacacaccc tcacgctgcg tgccctctag gtgcactcgg cacagccagg gttccagctt	180
caccaggacc aggetettet cettgggeet eccagetgac aggteetgee egaageecag	240
gtagatggta tagegtgggg agecaeggeg etgeegteee ggaatteeae eagetetegg	300

aagaagactc	tgaagtcgaa	gatgggggtg	tcacagttcc	gaggcagcag	gcaggctggg	360
gtggaggggc	tggcggacta	ggggggccgc	ccacctccca	gtacaccttg	cacttgccca	420
tgcgccgggg	gcatagttgt	ggcccctcaa	gctccaggtg	caa		463
<210> 70 <211> 413 <212> DNA <213> Homo	o sapiens					
<400> 70	tttttttcc	aggacgctca	cacttagttt	ttattagcca	cagtttccca	60
		aatacacagc				120
		gttgctcacc				180
		agagaacccc				240
		ggacacccaa			_	300
		gaggcctggg				360
		cctcccacag				413
	o sapiens					
<400> 71 tttgtttctt	tgaattttat	ctttatttct	ccataagggc	aatcagagaa	atatgctttc	60
ctttttaaca	agctcatctt	taatgtggta	gcaaagatgg	aaggtgcgag	accaaatctt	120
accaaactag	ctatttttac	aggccaataa	agcaacatgc	aatccccctc	aacaaattta	180
aataatcagg	caatactaag	aatgtatatt	ccattaaact	aaaataaaca	aggttgaaat	240
gtggtacaga	attcactgat	gagcctgtga	actccacgtg	aggatgtcca	gtgccttatt	300
tatctcagta	accagagtac	ccagcacaca	agataaaagt	gggtattacc	taagtggcca	360
ctattttatt	aataatgcac	ataacatatg	cttatcatta	actc		404
<210> 72 <211> 404 <212> DNA <213> Home	o sapiens					
<400> 72	tettaagaca	aatattcttt	tatttctqtt	aaactgaata	tacaattgtt	60
		cttataacta				120
		atctaattac				180
-		ataggggtca				240
					gttatagaag	300
		tagcctgaga				360
		ctattctctc			oucougosaa	404
	ggaegaeaaa	CCUCCCCCC	ggcaacccac	acas		
<210> 73 <211> 404 <212> DNA <213> Home	o sapiens					
<400> 73 cacctacact	gtctctgttc	tctcttccag	qaactcctaa	cattacatat	tgattgtcta	60
	-	_	_		tctggagaga	120
•		agactgtata		_		180
		-			agagacaggg	240
		_		-	gaagccttga	300
_		ttcccacttc				360
		tttttaaaaa	_		33 -	404
<210> 74 <211> 193 <212> DNA	J J 100		3			

<213> Homo sapiens	
<400> 74 tttttttt tttttttt tttttaggaa cataaacttt tattgtcatc cagcacctgt	60
gatagtttca tgtctctcta aaggagacag gaaattggag cattgtgggc ccttttaaaa	120
gaaaagagga gtaggtaggc acacccaggt gcttctaaaa caaccaagcc caaacctgac	180
	193
atgeteetee eea	
<210> 75 <211> 406 <212> DNA	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
-100 75	
agatttttta aaaattttat acaaatagac taactttgat ttaaagtaaa catataaaaa	60
ttgagaagaa tattgcttgc aacaatggac ttggaaggag aggaatggat taggcagggg	120
tacaaagaaa tggctcctac tcggtagttc caggcacatg cccagcactc tgcagaactc	180
tcacagggac accetetget geacegtgte etteageeca caaagtetga etgattttgt	240
aacaacaact tcaggtcagg aaaaaaacaa atgcaagaaa atcggaaggc acaagcaccc	300
atgtgatcta gaatgttctt ggggtgagga ataaggaggg aaagggatac ttttggttca	360
gcactacagt caatttcgcc attgttgaag aaaaacggta taaaat	406
<210> 76 <211> 224	
<211> 224 <212> DNA <213> Homo sapiens	
<del>-</del>	
<400> 76 ttttttttt aagccttata tttttaataa aaaataaaca gtctctgaca agcagttttc	60
tgaatcccaa aacaaaggaa atttgagggg gagaggtgaa ggggtcagct agggtaaagg	120
agtgaagaag gctcagatta cccctgccat tctgccaggg cagaagggat cagagtctgc	180
cccaactgaa gcaagaagaa aggtggtcag acttcaggaa agac	224
<210	
<210> 77 <211> 412 <212> DNA	
<213> Homo sapiens	
<400> 77 taagatcaat attcattctt catttgccct cgtaacgaaa atagattttt aaatgcctca	60
aatatacaaa catcattgat gcacacacat tccagaaatg cagaggtatg ctgctgccac	120
ggggtagggg tgcgggaggc ggcctggcct catggcgcat gaccgtgccc cagcccgggc	180
ctggcaggta gctggccact gataaatgcc actgggatcc taggagaagc tggggaccat	240
gcgtgaggta ctgaagggga ccatggtgga tggcatcctg ggcactttgt agcttgtctg	300
agggaaaggc ctctgctgcc atagaaaagc tggacacatg tcaccctggg gccctgacat	360
cctaaaatgc cccactgact accagtcact aggagaaagg tctccggcta tg	412
<210> 78 <211> 408	
<212> DNA <213> Homo sapiens	
<400> 78 ttttttttt tttttttt tttttttt tttttcatt tttagaaaaa actttattta	60
caaaaccaca actcagtctg ctttggtatt gacaaaatcc ctacaactga gatattaaag	120
agatacattt attttagagt tacataaaac cagaatccaa cactacccta ctttcctatt	180
cctttgtggc tctgaatgca gctttaaaaa aacaaaacaa	240
aacagctctt tataatgtac aatggcttaa gcaaatcgct ttagtttttt ttctatttaa	300
gatttaggac agactactcg tctaaaattc actatttaca gagaaggtcc tagggaacag	360
gataacttat ttaggtttag ctctcataat acaatatcca taatggct	408
garaactial traggeroug coordana acaabactou caacgges	
<210> 79 <211> 308	
<210> 79 <211> 308 <212> DNA <213> Homo sapiens	

<210> 84

<pre></pre>	60 120 180 240 300 308
<210> 80 <211> 365 <212> DNA <213> Homo sapiens	
<400> 80 ttacttttag actttttct tcataacttt aaaacaaaaa cagcgcatga	60
aaaccagtgt cttattccaa agtctcaact cagctgattg ccaggtgaac atcaccatct	120
tactcctctg aataactaga cacaaattac atagcaagtt cgtgtttctg cccacccaag	180
acacagccag taatcagtca caaacacaga cacagccaac tccaggggct ccagctttct	240
geocatette teteageagt teeteecate tgetaagatg egeetteetg gtggetetet	300
ctcaaggtgg gtcaaggctg aacaagacag aaaagcacag tctaggtcca ccatcacctc	360
ccact	365
<210> 81 <211> 383 <212> DNA <213> Homo sapiens	
<400> 81 tttgaacata aaaattettt atttaaeeta ateeageeag tattgagata gtttgetata	60
ttaaaaacaa gacgtttaaa aaaattacag caaagttagc aaggcagtga ctaattaagt	120
cactaagttt aattttatat tcttcacagt catttcataa tcatgtaatg gtaaacaata	180
ttttcagcca ctttggagat aagttaactt ttgaaaagaa tagaattcta gtagtcgtca	240
ttgaatttta taaaagaggt ttaaaaacatt aaagtttcca gaaataacac agtaaagaaa	300
tatgaaaata aactggaaaa taaaatatac ccacccatcc gaaaaatcta catcatctct	360
ttcatttgtc cccaatgcct ttc	383
<210> 82 <211> 386 <212> DNA <213> Homo sapiens	
<400> 82 tttttgacca tctccaaatg gttctttatt gaacacccac tttggctagg caatatcctc	60
cccctgccct ctaatccagg ctcaggtacc cccagtggag tatcctcaga aggcaactcc	120
caagaccagg agtaatgaga gattgggcag agggtaaggg acagcaggga gacggaggaa	180
aatgaagaca ccagggaaag aggagaggcc tgaactggac agctgatgct ttgtcctgcc	240
cagcacccat tegteeette tteaggtaat ateatetgee accaeaacca ceagcaccaa	300
ctctcagtct ctgtgggtac atgccaggcc tgtccatttg gtgtattcca tcttcctggc	360
cacaatgatg acttgaggct ggatac	386
<210> 83 <211> 284 <212> DNA <213> Homo sapiens	60
aagaagaaaa ggctgtaatt ttattttcaa atttttggaa gtttttcaga aaaaaataaa	60 120
atgacaagaa cacatacaaa tattgaaatt attcattgaa ctataaacac ttagcagagg	
aagggacttt tgatgtattt gaatccacct ccttctgaaa gcaggaatca cttctaaatg	180
tctctcatat ctttcttcaa ggagtggttt tccaggaggt tcccagcctc ctcaaatctt	240
tcccaagttt gatgcacttc acctcataaa aataatatat atat	284

<pre> &lt;211&gt; 355 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c </pre>	
<400> 84 acaattctcc gcagatttta ttaattataa cttttttttt cagacgtcct gccatcttct	60
cattcagact tttcttagca aaggtagtcc atggcaagta atgaattccc agtaactagg	120
tctgtaacag aagtaaattc tgtttttatg tttataaact caaaaagtaa catgaagtgc	180
aaacaccttt agttccttcc cctcggtaac cttcttttga tgaaccagtg tgcagcaaac	240
caggatgaag ttggatttgg gtgggatcca cacaggtcat tttcaggcaa gatgagactt	300
cccaagttcc atgnatagat tcatattatc agttatttta tgcattcatt tctcc	355
<pre>&lt;210&gt; 85 &lt;211&gt; 429 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 85	60
aganaattnn ttttattcag cctgatatag atcatttatg aaaaactaac agcaaacatc atcctcaatg gtaaaaggct gaaggatttt tctctaaggt taggaacaag gcaaatgcct	120
gctcttgcca ctctattcag catagtgctg ggagttctag acagagcagt taggcaagga	180
aaaggaaatc taagggcatc caaattggga aagggaggga aggtaaaatt atctctgttt	240
ggccaatgga tatggatttt atatggtatg gaataggaaa accettaaag gattcenece	300
aggggccngg ggncggggtg ggcctcacgg cctttttaat tccccagcac tttgggggga	360
ggggccagg gtgggggngg ggtttgcttt gagggnccag gggggtttcc aggacttggc	420
cgggggggg	429
<pre>&lt;210&gt; 86 &lt;211&gt; 331 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 86 tttttttttg atggtggttg tctctaatat ttatttgtct ggttataaaa ttaatatgtg aggagcattg gatttggtga gaacgttttg aaccctagct gtcacgtgcc acctgcggga tctagaccag tgacttctca gaactgccat ttcctcatct ggtagacagg atggtaagcc ctgtcttgct cactccacgt atgggcagtg cagatgaaat gagatcacag aggggaagca attggcaggc tggaaagtgc tgacaaatgg aaggggttgt gtcaccaccc tcagctgagg tagtaccaag gtccaagctc ctgccctcc c</pre>	60 120 180 240 300 331
<210> 87 <211> 417 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 87 gtaaacactt tgctttggtt ctgtgtctat actggcatct caggagagtg agatatccag	60
acctgatett cagaageact atgagecagt atceategge gecaetgatg agttecagag	120
tgaggacagt gctcacagct agaactgacc gtccccacac ttcatctccc tccagggntc	180
tectgetgae accagggget ceteaaaatt acteetteet teacacatgg gtgacaaggg	240
ttctcaaaaa gaacacctgg gcagagatgc ccactacagg caatgcttgt gggtgggcaa	300
gaagcataaa agaaccccaa tgtnccaaca ccaggggaat gggattaang ccagggggtt	360
acccatttgt aaacaaaaac aacttccaaa acccaaccgg ttaaacnggg ggaggtt	417

<210> 88 <211> 412 <212> DNA <213> Homo sapiens	
<400> 88 ttaaatgtat aaccttaaat atttatttga gaaaacaaat aaagatccaa atacgtgagt	60
tgatcatctg ataaaagtaa gagttgacaa aaaaggtaca tcttctccaa tccgaaaaca	120
gaaagtggga aagatcaagg tatcactaga ggtcaatgaa acaaaacata caatagtgga	180
tgacaaaagc caatctctga atctttgaaa agaatataat aaatgaacat ctgaaaccag	240
tgatcgagaa atgttttaga taaggcacaa aaagatacca agaatgttaa cactaggctg	300
tacatcctaa aacagtcaga tgagctcact gttataattc tggttcaccg caagaacctt	360
agcacaaaga aaggactcaa caaacatttg gatccatgaa taaaattatc tt	412
<210> 89 <211> 289 <212> DNA <213> Homo sapiens	
<400> 89 ttttcagtca cagaatgttt tattttaaac ttactgtaaa actttcaaat acaacacatg	60
tggcaaagaa acaacagttc acacacaaca tctgccacaa ttctctttga actgccattt	120
ctattatgtg atattttaca atttcttca atttcttaca ttcatggtat tcttaaaggc	180
agcaatgtca atttttctgc tttgaaaata gttcagttaa tgttctgaaa ttgcttaaca	240
tgacattttc cttttagtat tctactgctg cccacactga cataattca	289
<210> 90 <211> 398 <212> DNA <213> Homo sapiens <400> 90	
ttacaaaaga aaacacaaaa ccagaattta ttgaaagtag gtaccagctc tgattagaac	60
aatcagctca aagataccat tactcagaac aatatataca aaaatctcag ggaaaggaga	120
ataaaagaac ttaaaagaat acaacttgaa caggactgtt ttactaaaat ggtcttgttg	180
caaaataata acaaatacca cagagagccc tacatgagaa agccatgtgc cttcaagcct	240
ggggatgagg actctagttc tcaaattctt agaacatagc acatgattct ccaggcagag	300
aggetggetg gagaatgagg aceteactge tgactetget taacaaagte catgeeccag	360
gcacaggcac acatggaatg aggccaccaa gcaagtca	398
<210> 91 <211> 401 <212> DNA <213> Homo sapiens	
<400> 91 ttttttttgc tgccagctgc atttattgta gcatgtacaa accactcaca gccagcgcct	60
gtcaggggcc caggacactg gccagcgggg ccaaggagcc acattgctgg gcacatgccc	120
cataccetgg ccacceggca gcagtgccca gcatccetca atgacagage agecaggace	180
ccagcggtga ctgtcccaga ggacctacag gggcatgggg ccaaagctgg gtcctgcacc	240
ttgtttggcc tgcagatttg atttctgaat taatttctgc caacaactta aaaaatcagg	300
acateteaca tacaaatetg tatttetgge ttetecagat ttetgteatt aggeetgeat	360
teccaeacca gageaattag etacaeetga atatggeage g	401
<210> 92 <211> 421 <212> DNA <213> Homo sapiens	
<400> 92 tcatcttttt gttcactaat taatttagct gtgatacttg gagtatctga cactctgtca	60
agaacatctg ataatgttgt tgagactggc aaatgaagag tacggaattt gtggcctgct	120
ccatacattg gatgctggat gacgtggcta gtagcattaa ttctaccttt gtacagtgga	180
catggagact gaagaaacat tgtcactttc tcatcttcca gcatcaactg taaaaataat	240

<400> 97

cttcgtataa accctgaaat gttcccag	at gttggaaggt teeetetttg aggagatgte 300
tgaaatagtt cacaaagaac ctgtgcca	tc agcttttgat tattaggatg gcatgaaatg 360
cactgtagaa agaacgcaac agttgcat	tc tcaattgctg tgcgctgttg agtagtcagt 420
c	421
-210	
<210> 93 <211> 108 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
<400> 93	at ttttttttta aatttgaaga aacactgatg 60
aagccetgee atacceetee egagteta	
aageceegee acaeeeeee egageeea	
<210> 94 <211> 407 <212> DNA <213> Homo sapiens	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 94 tagagacggg gtgtcaccat gttggcca</pre>	gg ctggnctcaa actcctgacc tcaggtgatc 60
cqcatgcctc agcttcccaa agcattgt	ct tttattttnt attgttattt tntcaacatc 120
taagtattta ttaaggtgag tttttaca	aa caagcatcta tcccagtgtg cggggtgagg 180
atgggagagg agagtggggc agcaggaa	ga tgaggattct catcttttga taataaagct 240
ccagggttca ncccattgtg gatttcat	ag tececeagag acacatggge ettaaaaatt 300
	tc caacggggtg ccagtttagg gctgcaatca 360
gcttcttaag ggtccccgat gggnatca	mc cctgttggca tttaacg 407
×210× 95	
<210> 95 <211> 447 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<220> <221> misc feature	
<221> misc feature <223> n=a,t,g or c	
<400> 95	aga chagaggaaa caabcagaab aabagababg 60
	iaa ccagageaaa caaccagaac aacacaaca
	ida gadaccedda doodgadaa ameen agg
	ige ggedddggeo ooddoddae'r 1115
	acc gcacttactg aaataagaaa taaacacttt 240 tac attttctaag aatcttgcaa tgacaagttg 300
	gga ggaaagtggg aaaaggaaat taactaatac 360
	tt ccaaacactg cttttataac agaagtgttt 420
tacacttggc acaatattaa ttacttg	447
<210> 96 <211> 210 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
400. 00	rgc aagtactcca cagtcaataa ctcgcacatc 60
ctcaaaaaca tcttttattg attttgt	gge dageacced cagecanous errors
tgcatatggt ctgcttgcag catcggt	ccc cagacterea accessing
	209 000000000 039-5-55-55
ggtactatgt aataaacatc aacacaa	aya 210
<210> 97 <211> 441	
<210> 97 <211> 441 <212> DNA	

ttttttttgt tttctacagc accaaagaaa ttcaaatagg aaaaggagag ttgagaattg	60
ggaatcaaga atcagccctg tttccatctt agccacacca acttatatct ttatgatttt	120
caaagctttt gccatgtgat tctgccccca caaaggcatc ggtatttcct aaatggtacc	180
tgtatatgca gcgttgtttt ctataccatc cttattcaaa acttgcatgt ggcacaaaat	240
gggttggtgg gcaccaaggt atattttctg ttgatttgat	300
aggccaagga aaacaaacag ggaccaactt caaatccgaa cttctggatt ctgatcacca	360
aaggtcattg atccatggac atcaacatag gggacttgga tcaatttttg ggggtattgg	420
atttccatgg acagtttttt t	441
<210> 98 <211> 488	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
100 00	60
tttttaaaac ttttaactaa aaagtaaact ttaatglega aagtgeaaac teggggaagg	60 100
cagaaaacat cacacaaag gctgtcactt cacacttgga aggttgcaca gcggccgggc	120
agaggcgctc ctcacttgcc agacggggtg gcggccaggc agaggtgctc ctcactttcc	180
acacggtgtg ggggccgggc agaggtgctt ctcagttccc agatggtgct gggctgtcgg	240
actccattgc tggatgtgtg acttgggttt aagcttctcc cttctgctct catctggaaa	300
tgctgacagc ctgggcattt cctcctttgg cactggagac tgaagcctgg caaggcctgc	360
cctcagcagg aactccccct gggccccact ctgtgacctt gagcccaaga caggattttt	420
cctttacctt cttccagcca ctttgggcct cccggctctc tcagaagccc tgttaggtag	480
gtgacaac	488
.010	
<210> 99 <211> 484	
<212> DNA <213> Homo sapiens	
<400> 99 ttttttttt tttttaaat gcaacataca aactttattg aacaaaagta aactgtttca	60
gtaaactcaa acaggcactt aagagaaaaa ctgactggaa gaacttttat cttaaacatc	120
ttacagtaac ctacttgcag ttgcatttaa ctgagctctg ttgctgtgaa gaatacagct	180
catgcacagg tatggatgaa agatttgtac atttctcaag tattcactga atactacctt	240
	300
atatacacat atacattaaa tttgaaaaag atttgacgat ccccagataa acttcatttt tgttgatctt ttggaagagg tcgtctaaag agaagaatat gtggttctgg ctcatgaatc	360
tgttgatett ttggaayayy teytetaaay ayaagaataa geggeessy oosaayaa	420
atggtaatga acccagecta gactetgttg gacaccaagt etectecaet eetetteaga	480
catcagatga gttttaggta cttgtttgga aagttctctg gggtaacata acatgccggt	484
acta	
<210> 100	
<211> 401 <212> DNA <213> Homo sapiens	
400 100	
<400> 100 ttttttttt ttttcccgca gtcacaaacc attttattac ccacattgtg ctgtgacagg	60
gaggggtctc caatgaagag gacctagcac tggaaggtga tagccccaga agagaagagg	120
cttctttctc actgtgaggc agaaacaaat ttatctgtat gtaaactttt ccagtaatgg	180
gtgatgctgt gacacctgca gaaagcagcc tccctctgtt actactataa acacccattc	240
tgcaggcagt gtgagggcac agccttctgg agtgccacac ctgggtacca cggcacactg	300
gtgcatcccg ggaagatgtt cctagggcac cacatcttgg gtaccaagag gactgtgtgc	360
atccaattag accgaggtgc aaaagccaat gcgtcaacat c	401
<210> 101 <211> 533 707	
<212> DNA <213> Homo sapiens	
<400> 101 tittttttt tttttttt ttttttggag tttaaaaatc ctttattaaa aaaccccaaa	60
tttttttt ttttttt tttttggag tttaaaaate ttttaaa aan aanooodaan	- '

cggaaatgtt	ccaaaaaaaa	taaacacgtt	tctattaaca	tatcccatta	atcctattag	120
ttggaataag	atttaaagcc	caatttggaa	aagcttgcag	${\tt aatttcttcg}$	gaaattccta	180
aaaattacgg	taggcaaaaa	cttacaaaaa	catatgctat	cccagggcgg	ggaaaggaaa	240
aaaggggaag	gggctacaaa	ggccccgggg	gcatcacctg	cccacctggg	acccaggggt	300
ccgggaaact	gtcccgtaac	gggaaaccta	ccgggatgta	aaggtccata	agttacaagg	360
cttttttggt	ttaaaaaaaa	aaaaaggtct	gtactttcca	ggccaaaggt	gaaatggccc	420
•	taacgctttc					480
	ggtacaaact					533
<210> 102 <211> 339						
<212> DNA	sapiens					
<400> 102	p					
cctttctttc	ctttagaaga	agtagatgaa	cgagacgatg	cagcagactg	ggctcctgat	60
gaatgctggg	aggtaacatc	cacagaggaa	ggatcatagg	cagactttct	gttagaatgg	120
tcctcctgag	ggcttaaagt	gctatgaggt	tcaagagttg	atttttttc	tgtcgaagtc	180
ccagtccctg	gagaggagac	aaaatcatct	tcatatgaaa	caccacttag	aggagttgcg	240
gtggcattca	aaggccgtga	tgttgatgtt	cctctgtcca	acttgtcttc	aaaccctttt	300
ccatataact	gataggattt	tgtaaaaata	ttaatgacg			339
.010. 103						
<210> 103 <211> 346						
<210> 103 <211> 346 <212> DNA <213> Home	sapiens					
<400> 103						
_	tttgtctttt					60
	ggagagagga					120
	cagggagatc					180
	gcccaaatat					240
	agtcgcccca				cagagggggc	300
aggtttgctt	gcggggcagg	gaccaagagc	aaggggaaag	gagett		346
<210> 104 <211> 384						
<210> 104 <211> 384 <212> DNA						
	o sapiens					
<400> 104 ccqtqtcact	tctcacttct	aaatagctct	agacttggtc	ccattgcact	aacttaattc	60
-	atctttggct					120
caatcqttct	cccctttgat	gtgcagggca	qccactqatc	tctctaacat	ttacagaaga	180
atqcaccact	tgggttgttt	aaaacccttc	aatggcttcc	cattgcccca	agttcaaact	240
=	gcctacacat					300
	ggtggtcctc	<del>-</del>	_			360
	gacattactg					384
_	-	_				
<210> 105 <211> 494						
<212> DNA	o sapiens					
	-					
					caaatttta	60
	gctttcattt	_				120
	ggataaccat					180
	tgtttgcttc					240
	cttaattaaa		_			300
atcttgaagt	gtaatccaat	aagactgaaa	actaaacatt	tcaagtcttg	taccaaatag	360

<210> 111

	cttt gacggattta catcaataag agaacctatt 420 ctct ccaattacat tttcaagctc ctgtcggcca 480 494
<210> 106 <211> 241 <212> DNA <213> Homo sapiens	
<400> 106 ccagttttgt ccaaaataat ttattt	acca gccttacaaa aaacatgtcg gcaagagaag 60
	ctet cetteettee ggtggeteee ctaggacetg 120
ccggagagtg gagagtccgg tggggg	ggtc ccaagcccag ggtggacgag gaaaaggtca 180
ggaaatagag gattgtcctg agccct	cctg gccatggggg ccgacccagt gggcactgag 240
a	241
<210> 107 <211> 403 <212> DNA <213> Homo sapiens	
<400> 107 tttttttggc tgttaaaacg ttcacc	ccca caaaagggga gtggacagat ttattgaaat 60
caaactggga aaggagcagc tggacg	gctg gactctgggc ccagcccagg ccccgtctgc 120
ccaggatggg cccttgcaga gaggga	ggag aggcatgggg cctgcagctg cccacaagga 180
agcgcccttg gttacttcca cggtgg	gggg cetettggaa acetecaate tggaaagaaa 240
accaagggcc aaagtcacat ggacag	ggcc agagaaaggg actggggagg tggaaagcag 300
gcagaagcag gctcaggagc ccgcag	tgag ttaaactgtg cttctcaagg cggcctgggg 360
ggtgtgggtg ggggctgcca gccttg	cagg gggcctaggc tgg 403
<210> 108 <211> 253 <212> DNA <213> Homo sapiens	
<400> 108 taactcccag tcaccctgtt ttattt	caac catggagaaa agtacagagg aaaggctgca 60
	gtca cagcagatcc gagtccacgt gtggaaacag 120
cagccgcccg gccctgggtg tttcct	ccag gaaaggcctg gtcagtgaat gcctgcaggc 180
agcagggtgt caggaatcac ctgccc	gatg ccagcgctgc tcttgtctgg agggccagac 240
tgtcatgaag tca	253
<210> 109 <211> 118 <212> DNA <213> Homo sapiens	
<400> 109 ttttttttt tttttttgcc acacac	agca ctgggtggac ttttatttta aagtcaaagg 60
	acca tggatgccca gcccagaccc ccaaggcc 118
<210> 110 <211> 382 <212> DNA <213> Homo sapiens	
<400> 110 aattetttt tageteattg getate	ctta gcgtacatta tgtatggccc aacacaattc 60
	aaaa gattggacac tcttgtttta aatagactat 120
	tcag gataaatatc caagtatcta gagggtctat 180
gtgtgctatc tatacaataa aagata	gtta tataaaaatg aagagttete eataceatta 240
tataaacagg aggttttaca ggcatt	agtg atactctgtt ggactcaatg ggtttttttc 300
tctcttatag ctatgaaaga ctttat	gcca gtccaaaata tacaatgttg aaagacaggt 360
tttgaaataa atattctccc ca	382

<211> 519 <212> DNA <213> Homo sapiens	
<400> 111 tttttttta atggtttgga ctgcaaacta gtacttaggc tttcagcaac ttggcagtgt	60
ttgtctgatg cagatactgc acccagtttt aaaaaaaggct tattactaaa taaactagtg	120
aagttaacaa ctgaaggagt aatagtatga atgctggatt cagaagtcaa acttggcttt	180
tttccaaggg aagagcttat tcttggaata tctatatggg tagtttttga atcatttacc	240
tetttateaa teeetttaca tteaataett ataetatgae caactgaeet atgaecaacg	300
ttcaagtggg tactttcaga agtaaactgg ttctttccaa cagattcaga aatttcttcg	360
attagttctg tagtagaact taaaagtaat ggattaggag ccaactgtga agaagtttca	420
gggggacttc tggttaaagg attaacagat acagtaggtg atggggaagg gaagatgctt	480
tccccaagtg cccgaagggg attaggggta aatacccca	519
<210> 112 <211> 347 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
<220> <221> misc feature	
<221> misc feature <223> n=a,t,g or c	
<400> 112	
<400> 112 gacacgkgca cntctttatt ggaaaagaat aaagcagtca cngatgtggc aggggcagga	60
cacgagcagc tgccgtccyc cycccagsgt gcctggcatg gtcgcagggg agcgggtbcc	120
tggagteeeg gtgacaccae ggggcacaet gagggagetg aggageeggg geegegease	180
teetggdtge teageggate gtgtaettkt eccaettett tteagggteg tagggtteee	240
agcggctggc gggaaagatg tgcttkttct tctcgtacca gctcctcagc accaccttgc	300
ctgcatgggr ctcatcette tecacagtgg gsgtcaetga geaaceg	347
<210> 113	
<210> 113 <211> 387 <212> DNA	
<212> DNA <213> Homo sapiens	
<210> 113 <211> 387 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<220> <221> misc feature <223> n=a,t,g or c <400> 113	
<220> <221> misc feature <223> n=a,t,g or c  <400> 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt	60
<220> <221> misc feature <223> n=a,t,g or c  <400> 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagccctc ggaatgtatt	120
<220> <221> misc feature <223> n=a,t,g or c  <400> 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg	120 180
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan</pre>	120 180 240
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag</pre>	120 180 240 300
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtgt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag</pre>	120 180 240 300
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtgt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtgt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtgt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct  &lt;210&gt; 114 &lt;2212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtgt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct  &lt;210&gt; 114 &lt;2212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct  &lt;210&gt; 114 &lt;211&gt; 353 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt;</pre>	120 180 240 300 360
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgccaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatctttt cccttct  &lt;210&gt; 114 &lt;211&gt; 353 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;&lt;400&gt; 114 </pre>	120 180 240 300 360 387
<pre> &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <a href="#page-400"> <a hre<="" td=""><td>120 180 240 300 360 387</td></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></pre>	120 180 240 300 360 387
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgcaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatcttt cccttct  &lt;210&gt; 114 &lt;211&gt; 353 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;400&gt; 114 aaacatgttt attagaaaag taaaaaatat tgcataggnc ttaatacttg aacatcaagt gtattcatga acagtgagta tcttancttc atgtaaacag tnctagatgg aagacccaga</pre>	120 180 240 300 360 387
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttetct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agncettgtt tggnetctgg ngatttagat aaggeagaac tgageeete ggaatgtatt atctcaaagn getagtagea getgetatge aaagttetaa ggeeegagte aaatcetggg catctccaca gatgtgtgt agggeacggg etceagetet tgtgtaagaa agancaggan tgagancage tttattttgt aggegeaag gteteactat geteacacet gtaateceag etttgagaag aggatetggg caccagaagg gtetgggtag gaaggaaagt ggggaaaggg tgaaggneag ggaatettt eeettet  &lt;210&gt; 114 &lt;211&gt; 353 &lt;211&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;221&gt; mal,t,g or c  &lt;400&gt; 114 aaacatgttt attagaaaag taaaaaatat tgeataggne ttaatacttg aacatcaagt gtatteatga acagtgagta tettanette atgtaaacag tnetagatgg aagacceaga tggeacteet eeeggggngg gntnecagee eeeaceetet cageeeetee eetgeeaget </pre>	120 180 240 300 360 387
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 113 atctttctct ttattctgac aacattatga cattaaataa aanccaagng gtattggatt agnccttgtt tggnctctgg ngatttagat aaggcagaac tgagcccctc ggaatgtatt atctcaaagn gctagtagca gctgctatgc aaagttctaa ggcccgagtc aaatcctggg catctccaca gatgtgtggt agggcacggg ctccagctct tgtgtaagaa agancaggan tgagancagc tttattttgt aggcgcaag gtctcactat gctcacacct gtaatcccag ctttgagaag aggatctggg caccagaagg gtctgggtag gaaggaaagt ggggaaaggg tgaaggncag ggaatcttt cccttct  &lt;210&gt; 114 &lt;211&gt; 353 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;400&gt; 114 aaacatgttt attagaaaag taaaaaatat tgcataggnc ttaatacttg aacatcaagt gtattcatga acagtgagta tcttancttc atgtaaacag tnctagatgg aagacccaga</pre>	120 180 240 300 360 387

ggtctgtaag ataggctgcc tacaacaggg tcagtaggng atggctccga tcc	353
<210> 115 <211> 195 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 115 cataatacat atattattg ccatcagagt tctgcaattc tcataaaatt agagtcagat ggaattcagg gacacgtgca agttttggaa atggacacag ataacagtat agaactgtac acaaaataat taccatttat taaacacact ggtttagnac accctggatg gatgagaatg</pre>	60 120 180
ngcnccataa ttttt <210> 116 <211> 437	195
<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 116 cataatgcta atgcaagagg gcttgaagta tcaaagagtc cacaggaaat ggatgcccc agtaatatct ttttttaaa aaaaatatac attatataat atatatat</pre>	60 120 180 240 300 360 420
cntttggtgc ngctgga	437
<210> 117 <211> 366 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 117 ttttgagagc tgatgacaga caacagcaag ctactttaca gaatctacca actgggtagg	60
aaagtettet gagtteett geagacaaga aaagttacet gttgattgtt ggecaateaa	120
taagggactt teetetetge cattaagage aacgatgetg accaeatact etgtgeetgg agtgaggttg gtgagggtga tggaatteeg agagtgggge accegatett etegaggtet	180 240
cccactgaag tgctcgggat gatggcggat cctgtagcca gtgatggtgg ctcgaggagc	300
aatccagtgc acagtaaaag agttggcagt aatatccaga aaagtcaata cccatttggg	360
gantca	366
<210> 118 <211> 295 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 118 tttttttt tttttttt ttttctgaga tggttctcgc tacgttgcct aggctgtagc gcagaagcta tacacaggca tganggcagc acactacagt ctccaattcc tgggctcaag tggtccttct gcttcacctc ctgagtagct gggactacag ggacgtgcca ccccacctgg catgatacct attcacaga ntctgttact atagaaaaac agctctccta ctcactttt</pre>	60 120 180 240

tcttgtaaaa ttgtataaca ttattaggca aaactgggag antacaantt ttaaa	295
<210> 119 <211> 344 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 119 ttggataccc aagaattaat tttagaattt aaatttggct ttagtatcag taagtacgga	60
tatcacatcc tcagaaccaa aaacgaacaa ctcattttct tctttcagga aattaaaagc	120
tacaaaggca aaaagagggt tgaggatata tgaatataac aacttttaac tagctgacta	180
attaaagaga ggattagcaa agataattga agtctactta taatttcaaa tttccatttt	240
gaaaaagttt tatttttaat tcaaagagga ttaaaataag ggngccaaaa ctgatatgga	300
atttcaaata ctctttctct gcccaatgga tccanaacca atta	344
<210> 120 <211> 382 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 120 tttttntang aaatgacaag taccgtttat tgtcgttaca caaatgaacc cagcctctgg	60
cttgggcacc gtcccacgga ccagcagatg agcatggtca gccgacccct ttccccaccc	120
ccgagtcatg tgcagtcata cantccaggg agaaagtcgc agtntcgant accggacaca	180
ggttcccttg gnttggtggn gcatctntga tccacagant ggcccacctn tcggagtggc	240
caacggagtc gntgaaacgt tgtcaaataa gncaagtaag tgcaggagcc ctggggntgg	300
ggggcctntg gcttntgnca gccgggtggg gaggagggat ntccaaggtt tctgcggggt	360
agggeetegg cttccanace te	382
<210> 121 <211> 404	
<211> 404 <212> DNA <213> Homo sapiens	
<400> 121 tttctaattg agcaacttta ttcacataat ttctacacca agaactcgag gttatctctg	60
atggaaccaa tttcactaat atttacttta agggcagaga agtcaaccaa gtcctcacag	120
tctcaagaat caaaaacaaa acaaaaatac aaacagagag caagtgggaa gataaataac	180
actccgaaat aacctagcta cacactttta gtttccaatt tttctagcat gaaatcactt	240
ttctcttcca tcctgtaaga cgtgttctct cctctctctt ctgagttggg ctgtgaagag	300
ctgccctggg tctcccgggt ctgacgggtg ttgtccaccc catctgaggg cacccagggg	360
aattgecetg ggggteegga geeetggggg tttetggata geet	404
<210> 122	
<210> 122 <211> 431 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 122 aaccggatgt ctcagactgt aagcgaagga caaatttgtg agatttgggg tctatgaact	60
cttcagagag tatgatgaat ggaattttct tcacattgac tacgaggctg aagtccaagc	120
acttaaggac gaacacaatt ccatccgta atccattagt cacagcctca tcactgacaa	180
gcctccactg tgtagagagc cagcggncct tgtcatattg cagggtgggg cccgcactga	240
ggtaccgttc taggnaggcc ttgggggtca tgccngttgg tgatgcagaa ggccagggtg	300
22 23 23 23 23 23 23 23 23 23 23 23 23 2	

	cctgggccat			ggggtnatgc ggcngcctcc		360 420 431
<210> 123 <211> 3323 <212> DNA <213> Homo	s sapiens					
<400> 123	taaqaaaatt	ggaagtattc	cctcctcatt	tggtgggttg	gtggctggga	60
				atcgagaact		120
				ggaatggtat		180
				cctggtgtcc		240
				atgatccatt		300
				ggctccattg		360
				aattttcttc		420
				gagctgcttc		480
				tggctgaagg		540
				tcttatttat		600
				aatcagcatg		660
caacgctatt	cctgtggtgg	gagaaggcct	tcatgcagcc	caccaagcca	tactccagca	720
gggagggcct	gttggttttc	agctttaccg	ccgaccttta	aattttccac	tcaggatatt	780
tctgttgatt	gtcttcatgt	gtataacatt	actgattgcc	agcctcatct	gccttacttt	840
accagtattt	gctggccgtt	ggttaatgtc	gttttggacg	gggactgcca	aaatccatga	900
				accataaggg		960
				cagaaggtta		1020
				gctggagttg		1080
				agggttccct		1140
				ctgcatgcca		1200
				gtaattgaac		1260
				aaactggcag		1320
				gcttctggtg		1380
				cggatttatc		1440
					agcgccttta	1500
					acgaacggaa	1560
					aaagtagttg	1620 1680
					tctttggaga	1740
					tgtgttctca	1800
					gacattactg	1860
					ccttggatta	1920
					aatctagttg	1980
					cagtagtgcg	2040
					agcagctctc	2100
					gaacgttaaa ctttatgctt	2160
					acatttccta	2220
					gtgctaggtg	2280
					attgggagtt	2340
					attttcatga	2400
					cacacaacta	2460
5004900000	5050005000					

```
tctgtttatt ttttgtagca gtggccgaaa gtcctgcaag gtcataaatc tttcagagtg
                                                                     2520
acatcaccaa ctgtactgca tcttactgga tttaggactt ctgagatgct tgtgaagtat
                                                                     2580
agatgtggtt gtggtcttag attgacagca ttagagaaga ctggttagaa catctggtct
                                                                     2640
cgctggttag tgcctcgttg gctgaggact aggtgtgcat ttctcctagc ttttcatcag
                                                                     2700
gaaatcccaa agtttccaaa gctttttgtt tacagaataa aacttcaaat aaaaccaatt
                                                                     2760
cattatttgt ccagaaggaa gcttggctga gctggccttt taacatagga atgtatttcg
                                                                     2820
ttggaaacat tctgaaaaat ctcagagaac tgaaccctta caaactttgt tttccctcat
                                                                      2880
aaccaaagct tcaggttaga agtttagaaa aatagaatgg ttgggtacat gatctaaatg
                                                                      2940
tttaatgcta aaggtatatc gtaagggtag tgtttgtttt tgaacgataa tttagaagtt
                                                                      3000
ctcatagaaa gcgtataaca taggtcttca gaaactataa aagaattttc atatagtatt
                                                                      3060
aaaatccata gactaaaatc tgagaatttt ttaacatatg caagtcagcc aaacataagc
                                                                      3120
taccaaaata aagagcaatg tgttctggct gttttatact tcaacaattt tttccctaag
                                                                      3180
tggtaagcaa ttactttaaa acatattttt aaaaacatcg gtatcgggag ctgcggtggc
                                                                      3240
teeggeeggt tgteetggea cacaaggagg egaggetatg egttegagge caacetagge
                                                                      3300
                                                                      3323
aaaattggaa aaaaaaaaaa aaa
       124
18596
DNA
Homo sapiens
<400> 124 cctgtagtcc cagctacgcg agaggctgag gcagcagaat tacttgaacc caggaggcgg
                                                                        60
aggttgcagt gagccgagat cgcgccactg cactccagcc tgggtgagag agcgagactc
                                                                       120
                                                                       180
tgtctcaaaa aaaaaaaaa aagaccgcca gggctcaaac aaaaaacctc ggaaaagccc
tggcggtctt ttttttttt tttttttt ttttttggga cagtcttgct ctgtcgccca
                                                                       240
ggctggagta caatggtcgg atcttggctc actgcaacct ctgcctccca ggttcaagca
                                                                       300
attettetge etcageetce caagtageea ceaegeecag etaatttttg taettttagt
                                                                       360
agagacgggg gtttcaccat gttgtccagg ctggtcttga actcctgacc tcaggtgatc
                                                                       420
caccegeete ggeececcaa agtactagga ttacaggegt gagecacege gtecagegee
                                                                       480
ctggcggttt ttaatcaagt agaaaagctg cattatacca cttgcttcgg ttgcttcagt
                                                                       540
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga tctcaaacag
                                                                       600
cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct tagagaaggc
                                                                       660
                                                                       720
geggtegace agaeggttee caaagggege agteetteee ageeacegea eetgeateea
ggttcccggg tttcctaaga ctctcagctg tggccctggg ctccgttctg tgccacaccc
                                                                       780
                                                                       840
gtggctcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc gcgaccccgc
                                                                       900
 cgagcaggaa gaggcggagc gcgggacggc cgcgggaaaa ggcgcgcgga aggggtcctg
 ccaccgcgcc acttggcctg cctccgtccc gccgcgccac ttggcctgcc tccgtcccgc
                                                                       960
 cgcgccactt cgcctgcctc cgtcccccgc ccgccgcgcc atgcctgtgg ccggctcgga
                                                                      1020
 getgeegege eggeeettge eeceegeege acaggagegg gaegeegage egegteegee
                                                                      1080
 gcacggggag ctgcagtacc tggggcagat ccaacacatc ctccgctgcg gcgtcaggaa
                                                                      1140
 ggacgaccgc acgggcaccg gcaccctgtc ggtattcggc atgcaggcgc gctacagcct
                                                                      1200
 gagaggtgac gccgcgggcc cctgcgggac gggtggcggg aaggagggag gcgcggctgg
                                                                      1260
 ggagageget egggagetge egggegetge ggacecegtt tagteetaac etcaateetg
                                                                      1320
                                                                      1380
 ccagggaggg gacgcatcgt cctcctcgcc ttacagacgc cgaaacggag ggtcccatta
 gggacgtgac tggcgcgggc aacacacaca gcagcgacag ccgggaggta agccgcgtcc
                                                                       1440
 cageggetee geggeeggge tegeagtege eccagtgatg cegtggeece egaggeggge
                                                                       1500
 gtcatcgggc agcgtttgcc cagtgctgga gggttaggga gagctgcctg ggcttgaccg
                                                                       1560
 cgcgccggtc tcaaagtcct ggctttggcc cctcctccgt tttcccctgt ggaccattcc
                                                                       1620
 gcttcgcagc gttttcaaaa actggagcga aagtgatgtg ggcggggcaa aggcggcggg
                                                                       1680
 aagaggacag cactgaagct ggcgcgggaa cttggtttcc tggtggcctc ccatccaatc
                                                                       1740
```

1800 cccacgaacc agctttcctc ttaaaccttg aaaagagaaa ttcgggagtt cgagttctta 1860 gtcgtccttt cctctttcct ttccgacagg agcaccccag gcaaaaaatg tctcgcgggt 1920 1980 cagccgttgg ccctccctaa ggccacaccg tcctgccgtc ctggatcctg cgccagctgc gcgggggagg ggactcgaag gtgtgtgagc caggggctga ccttgaccgc tcagataaat 2040 ggagcgcagc cttgacacag gggtggaggt ggttttgaat ggggaaaccc attcgtggtg 2100 aagcagattc actgtagcta gcggaaaagc cctccggccc acggacccat ctagagacga 2160 atacatagca gctgctgtgg ctgattggcg tgggacagcg tggggagttt tgtctgagga 2220 2280 gagggatcca cttttctgca gctccaagcc caggggcctt tgatgagcca tagacctcat ttttaaccca cctttctgct tagacattga gcaagttact tctcatatag cttccctata 2340 2400 tgttaaaaat ggagaaaata atgcttagta ggcaattctg ataaaagcag gtgcttgcaa aaatctctct gttgtctgaa tataaactgt accacaagcg agtgcggatg aacgaggact 2460 gcatttaaag ataagttttt acactttcat ttctctgtgg ctcgacactt ctgatgcctc 2520 cctttttgtt cctgggacac atgcttggtg ttgtcttcac acctttgtga caggattagc 2580 actagtgggc agtggatgat agctcctcct cccttttgcc acatgttcat ccctgccctc 2640 gccaccatct cactgtgtgg aattcctgtg tccactggtc accggggcac agaagtgctg 2700 2760 tctcagcctg aatcgggcca ctgatgggac ttgcagcctg ggagctccac cgtgatctct ggcccacttt gcgggagtct aggctttctg gatgctccag gcctcacgtc ccagggcagt 2820 tttcttccct gaagaaagtt ggatggcatg atctgtcttc ccatcttgaa accgtatggc 2880 2940 aaattgtttt tcagatgaat tccctctgct gacaaccaaa cgtgtgttct ggaagggtgt tttggaggag ttgctgtggt ttatcaaggt aaagaagtcg ctgctattag aagtcagtag 3000 3060 tctgttctca acacagcagc cagtgagatc ctttcaaaac tcaaagcagc caggtgtggt ggctcacgcc tgtaatccca ccgctttggg aggctgagtc agatcacctg aggttaggaa 3120 3180 tttgggacca gcctggccaa catggcgaca ccccagtctc tactaataac acaaaaaatt 3240 agccaggtgt gctggtgcat gtctgtaatc ccagctactc aggaggctga ggcatgagaa 3300 ttgctcacga ggcggaggtt gtagtgagct gagatcgtgg cactgtactc cagcctggcg 3360 acagagggag aacccatgtc aaaaacaaaa aaagacacca ccaaaggtca aagcatatca 3420 ttcctcaccc tcaagccctt agtggctcca tttcactcag taagagccac ggtccttatg gtgtccgttt ttcagctctg accttagctg ctgctctctg caccaccctg ctgttcttgt 3480 gagtttttga gcacaccggg acatccccac tccctggaac cttcttcccc cacacttggc 3540 3600 ttcttccttt gagtctctac tccactcggg caagccttcc tagacctcct gatttaaaac 3660 tgtgactctc ccccaacctc cttggtgttt ctccgtagac gaacatcacc atctgatgta 3720 tgtcagcctt tcccttcccc tgttagaagg gggacagcag gtagtaaaag tgaaatgtgc 3780 tgtaagettt atgagggeag aggatttgtt tetegtgtte aetgttgtat egeeagggee tcaaacacag cctgccacat agtaggagtc aacatatatt gatcactaaa tgtagatacc 3840 3900 acctgtgttc ccatgttcat ataaattcta gaagagtctc ttcagtaaca aggtgaaccc 3960 cttccagagg gctgagtagg tacctcaggc cggggccaga gtgctgtgaa gacagcagca 4020 geccagacea agettetetg tgtteegtgt eetggtetag aaccagegat gttetttetg accagtgctt tttggaaggt ggctgaggtc tgggctcagg tctgggccat actagaagct 4080 gggatccctt ctatagagca cttggtatgg cttgtatggt cttggggcaa gccagaccca 4140 agccctctta tcccatttta gaaagggctt caatttggat ccagccccag gtctgcctta 4200 gctctgtatt cttggggtat tttgttctgt attggcctat cttgactaac aatgagcctt 4260 ggatttgaaa catatcatca gaaacctcag aagacaacat tcttaaactg gctagagcct 4320 4380 ggtctgaatg gatgaaaagg agagactttt gaagcaatat gtaaaagatt gagaaatgat ttgttggaaa tttctcaatt ggagaaattt ctttgatttg ttggaaattt ctttgattct 4440 4500 ttctcaatca aagaaaatcg ggacaaactc aacaatagaa agggaggaag caagatactc agaaataaaa tgcattcccc tgtttcaact taatgcttca attcaggatt ctaaggaatc 4560

4620 cttgccagga atgtcagact caccttgata gttggagtta ctccattggt gactcgatca aatacaggag ttgaggcacc tgcactgtaa aatactgatt agtctgatca ttaggaatat 4680 cctgtatgcc aggtagaaga tacattgaac agattgcatg taggcattaa attcattttg 4740 4800 gggtattaca tatagacaac acatttcatt aagaaacata aaactgtcag atcggtggaa 4860 tacttaaaag cacttggagg tgtttagcct aaaaagctta gttgagggga atggaagaaa agatctggga gggtggttcc aaagaaggga tcagactatc ctaaagccct caggaatctg 4920 4980 ggctgggacc acctacttaa agataggatg ggcagctggg tgtggtggct cacgcctgta atcccagcac ttcgggaggc cgaagcgggc ggatcacctg aggtcaggag ttcgaggcca 5040 5100 gcctgaccaa catggagaaa cgctgtctct actaaaaata caaaattagc tgggtgtagt ggcgcatgcc tgtaatccca gctactcggg aggctgaggc aggggaatcg cttgaacctg 5160 5220 qqaqqtqqaq ggtgccgtga gccacgatcg cgccattgca ctccagcctg ggcaacaaga gcgaaactct caaaaaacaa aaaaaaggat gggttccata tgggtggtgt caagtgccca 5280 5340 cctcctagca agtcagcagg ggccagaggc ccttgtaagt ggtgtctcgg ggggatcaac 5400 5460 cacaaatgct aaagagctgt cttccaaggg agtgaaaatc tgggatgcca atggatcccg 5520 agactttttg gacagcctgg gattctccac cagagaagaa ggggacttgg gcccagttta 5580 tggcttccag tggaggcatt ttggggcaga atacagagat atggaatcag gtgaggagat 5640 agaacaatgc cttccatttc cgggtgccct tcctagcacg tgtttgctcc gttgttttag ataaggtctg ggggatgagt caatgtcaca ggagctgatg tatagctttg accttgtgag 5700 5760 gggtggtgcc aggttgaagc cacaattaac gcctactgaa ggccgtttca catcttttt 5820 tttttttttt ttttaattat tatactttaa gttttagggt acatgtgcac aatgtgcagg ttagttacat atgtatacat gtgccatgct ggtgcgctgc accactaact caccatctag 5880 catcaggtat atctcccaat gctatccctc ccccctcctc ccacccaca acatccccag 5940 agtgtgatgt teceetteet gtgteeatat gttetegttg ttegatteee actatgagtg 6000 6060 agaatatgcg gtgtttggtt ttttgttctt gcgatagttt actgagaatg atgatttcca 6120 tttcaccacg tccctacaga ggacatgaac tcatcatttt ttatggctgc atagtattcc atggtgtata tgtgccacat tttcttaatc cagtctatca tgttggacat ttgggttggt 6180 6240 tccaagtctt tgcctattgt gaatagtgcc acaataaaca tacgtgtgca tgtgtcttta 6300 tagcagcatg atttaatagt cctttgggta tatacccagt aatgggatgg ctgggtcaaa 6360 tggtatttct agttctagat ccccgaggaa tcgccacact gacttccaca atggttgaac tagtttacag tcccaccaac agtgtcaaag tgtcctattt ctccacatcc tctccagcac 6420 6480 ctgttgtttc ctgacttttt aatgattgcc attctaactg gtgtgagatg gtatctcatt 6540 gtggttttga tttgcgtttc tctgatggcc agtgatggtg agcatttttt catgtgtttt ttggctgcat aaatgtcttc ttttgagaag tgtctgttca tgtccttcgc ccactttttg 6600 6660 atggggttgt ttttttctta taaatttgtt tgagttcatt gtagattctg gatattagcc 6720 ctttgtcaga tgagtaggtt gcaaaaatgt tctcccattt tgtgggttgc ctgttcactc 6780 tgatggtagt ttcttttgct gtgcagaagc tctttagttt aattagatcc catttgtcaa ttttggcttt tgttgccatt gcttttggca taggcatgaa gtccttgccc atgcctatgt 6840 6900 cctgaatggt aatgcctagg ttttcttcta gggtttttat ggttttaggt ctaacgttta 6960 agtetttaat eeatettgaa ttgatttttg tataaggtgt aaggaaggga teeagtttea gctttttaca tatggctagc cagttttccc agcaccattt attacatagg gaatcetttc 7020 7080 cccattgctt gtttttctca ggtttgtcaa agatcagata gttgtagata tgcggcgtta tttctgaggg ctctgttctg ttccattgat ctatgtgtct gttttggtac cagtaccata 7140 7200 ctgttttggt tactgtagcc ttgtagtata gtttgaagtc aggtagcgtg atgcctccag 7260 ctttgttctt ttggcttagg attgacttgg cgatgcgggc tcttttttgg ttccatatga actttaaagt agttttttcc aattctgtga agaaagtcat tggtagcttg atggggatgg 7320 7380 cattgaatct ataaattacc ttgggcagta tggccatttt cacgatattg attcttccta 7440 cccatgagca tggaatggtc ttccatttct ttgtatcctc ttttatttca ttgagcagtg

gtttgtagtt ctccttgaag aggtccttca catccctttt aaggtggatt cctaggtatt 7500 7560 ttattctctt tgaagcaatt gtgagtggaa gttcactcat gatttggctc tctgtttgtc tgttattggt gtataagaat gcttgtgatt tttgcagatt gattttatat cctgagactt 7620 7680 tgctgaagct gcttatcagc ttaaggagat tttgggctga gacaatgggg ttttctagat atacaatcat gtcgtctgca aacagggaca atttgacttc ctcttttcct aattgaatac 7740 7800 cctttatttc cttctcctgc ctaattgccc tggccagaac ttccaacact atgttgaata 7860 ggagtggtga gagagggcat ccctgtcttg tgccagtttt caaagggaat gcttccagtt 7920 tttgcccatt cactatgata ttggctgtgg ctttgtcata gatagctctt attattttga aatatgttcc atcaatacct aatttattga gagtttttag catgatgtgt tgttgaattt 7980 8040 tgtcaaaggc tttttctgca tctattgaga taatcatgtg gtttttgtct ttggatctgt ttatatgctg gattacattt attgatttgc gtatattgaa ccagccttgc atcctaggga 8100 8160 tgaagcccac atgatcatgg tggataagct ttttgatgtg ctgctggatt cggtttgcca 8220 gtattttatt gaggattttt gcatcaatgt tcatcaagga tattggtcta aaattctctt 8280 ttttggtgtg tctctgccca gctttggtat caggatgatg ttggcttcat aaaatgagtt 8340 agggaggatt ccctcttttt ctattgattg gaatagtttc agaaggaatg gtaccagttc 8400 ctctttgtac ctctggagaa ttcggctgtg aatccatctg gtcctggact ctctttggtt 8460 ggtaagctat tgattattgc cacaatttca gctcctgtta ttggtctatt cagagattca acttcttcct ggtttagtct tgggagagtg tatgtgtcaa ggaatttatc catttcttct 8520 agattttcta gtttatttgc gtagaggtgt ttgtagtaat ctctgatggt agtttgtatt 8580 8640 tctgtgggat cggtggtgat atccccttta tcatttttta ttgcgtctat ttgattcttc totttttott tattagtott gotagoggto tataaatttt gttgatoott toaaaaaaco 8700 agctcctgga ttcattaatt ttttgaaggg ttttttgtgt ctctatttcc ttcagttctg 8760 8820 ctctgatttt agttatttct tgccttctgc tagcttttga atatgtttgc tcttgctttt ctagttettt taattgtgat gttagggtgt caattttgga tettteetge tttetettgt 8880 8940 gggcatttag tgctataaat ttccctctac acactgcttt gaatgtgtcc cagaggttct 9000 ggtatgttgt gtctttgttc ttgttggttt caaagaacat ctttatttct gccttcattt cgttatgtac ccagtagtca ttcaggagca ggttgttcag tttccatgta gttgagcagt 9060 9120 tttgagtgag attcttaatc ctgagttcta gtttgattgc actgtggtct gagagatagt ttgttataat ttctgttctt ttacatttgc tgaggagagc tttacttcca actatgtggt 9180 9240 cggttttgga ataggtgtgg tgtggtgctg aaaaaaatgt atattctgtt gatttgggat 9300 ggagttetgt agatgtetat taggtetget tggtgeagag etgagtteaa tteetgggta 9360 teettgttga etttetgtet egttgatetg tgtaetgttg acagtgggtg ttaaagtete 9420 ccattattaa tgtgtggagt ctaagtctct ttgtaggtca ctcagatgat tggcacttac 9480 tgggegettg geaettteea tactgtgtea teggeagata getgeatggt tggtgttegt 9540 gctggggaat gggaagttca tcggtgggac aaggacaaaa tgcccccatt gctttgttgt ggetttaate teeetttega ggetgageea cagegtgetg taggtggege tgetgtgaag 9600 9660 cgcagtacca gggtcacact ccactcccag ctctgcagag gtggagaaag aatgaaacat ctcactcctg gacttccact ttcctgtcac tgttggtgtc acctcttact ggatgtcaca 9720 9780 gageceagee ceteceacet gtgeetagga aaageagatg ceacettgga atgtggggtt 9840 tgtgtgtgca atttactagc tgggcagaga ccagcaacct ggagagcagg tgtctcgtct 9900 aaggggacag tcacatttca cctccagcca cctggaggaa tttgggcctg gtgatgtcag 9960 aattetteaa taaaageeta aaatetatat tttatgtgeg gteatgagat etgttaaatg ttagcaactt caggaagttt aaaaatgctg tgtggaccta gaataggcaa gttcttaaag 10020 10080 gcagaaagtg gaatgctagt ttccagggac tggggaacag ggaggaatgg ggagttcatg 10140 tttaatgggc acagaggttt tgttagggat gacgaaaaag ttcgggagat ggtgatggtg atggagatgg tgatggtgat ggagatggtg atggtgatgg tgatggtgat gggtgatggt 10200 gatggtgatg gtgatggtga tggagatggt gatggtgatg gtgatggaga tggtgatggt 10260 gatggtgatg gtgatggaga tggtgatggt gatggagatg gtgatggtga tggtgatgga 10320 gatggtgatg gtgatggtga tggtgatggt gatggtgatg gtgatggaga tggagatggt 10380 gatggtgatg gttgcctaac atcaggaacg tgcttaatgc ttctgaattg cacacaaaaa 10440 tggcaagttt aatattatgt gtactttatc acaatgaaaa aagctgctgc gtgggccaag 10500 10560 ttacttqtqc aggtaatqtt ctgcaggtqg ttgcctgcac ctcagttqta gggtqtccgt aggatgtgag gccagtcccc gggcttaatg atgctttaaa tcctgcctag tattcaatta 10620 tttcttgtcg cttaaaaggc ctaataaaat tatggtctta gtttacagtg gtatgaatgc 10680 ttagctgttg gattttagta ggaaagttcg tccctttttg tttttaattt tgttttacag 10740 attcacagga atttttttt ttttttttt ttttttttt taatgcacag aaagtttccc 10800 tggactctct acccagtttc cccagtgata atatcttggg taacatcctg tatacattca 10860 10920 cattggtgca ttcctcagag ttgtcagatt ttgctagttt tacgtgcact tgtgtatgtg tgtatttgca attttagcac gtgtagactc ttgtaaccac tacaatcaag ttacagaact 10980 acactaccaa ggttcatctt tttaaaatct ttgatgttac cttttttgga acagtgacca 11040 11100 tgagaggact ttcctcccaa aattttgaaa actactgaac cagaatatag tctgacacta ataggtagaa atttaaccaa aggagattat gaagctctgc acttgagtta acaaaatcac 11160 11220 ttctcagctt ccagttccat ctcagaagga aggaaaaggg attaaaaatc cagagaccag 11280 aaaatgggag caaagtacaa ggtggtgtaa tcattacaga ggtttcctga tgtttccaag 11340 tcagtcgtgt gttgagctgc taaactctaa agtaatttta ggtggaatgt tggaaacatg ctgctgaggt gatagaaagg aatccatggt cctctgttag ttggaaagta tatggaatac 11400 11460 tatattctac ataagataca atactctctg tgagacaagg ataaagtaga ttttgtcagt gaaattgtga caagaatcgc tgatgggttt agagcctaag tttgcgagga gcactggaag 11520 aaattaagat tgttgagatt ggaaagggtt agctatgggg gaacaggagg aggtgactcc 11580 atgacagacc aaatattcaa aggactgtgt agaagaggaa aaagactttg ttagggctcc 11640 11700 agaggacaga gccaggagtc agacagggcc ttgaactcaa cccaccgaga tctgcaaact ttgcaggatg caccagatgt cttgtagcca tgggtcaagg ggggaccctg ggtaagagac 11760 11820 tgtaatagat gacctctaag gccatctcat gacatgtgtg attaatgtat gtacctgtcc tctctttttg acaattctac agattattca ggacagggag ttgaccaact gcaaagagtg 11880 11940 attgacacca tcaaaaccaa ccctgacgac agaagaatca tcatgtgcgc ttggaatcca 12000 agaggttgaa agaaccccgt cgtcttcatt tatactaacc atactcttag agggaagcaa 12060 tetggttttg tgcagaggca etgagggagg caggaceetg ggcaacttee eccagecaca tggttgtgtg acgttgggca agtcacattt tgctgcactt tcaccttcag atcatgaggt 12120 12180 tgggcccaga ggattttttt ttttttttt tttttttgaga cagagttttg ctctgttgcc caggetggaa tgcaacggcg tgatettgge teactgtaac etetgeetee tgggttegag 12240 tgattctcct gcctcagcct ccaagtagct gggattacag catgtgccac catgcctggc 12300 taattttgta tttttagtag agacgggttc acatgttggt caggctggtc ttgactcctg 12360 12420 acceteagat gatetgeett geeteageet eecaacegag tgatettaag ttgtgtatta 12480 tactcattct tacacaaaaa gggctttaaa tgcctagaaa ctacatgaag atgttaacat 12540 tttaaatgga agcagatgaa gttccagctc gctgccacct cactaacatt tttaacaatt atattgtaaa attcaactct accagggtgt agagccaggt gtggtggctc acacctgtaa 12600 ttccaacaac tccagaggcc aaggcgagag gatcatttga acccacggaa tttgaggctg 12660 tagtgagtca tgatcacgcc attgcactcc atcctgggca acagagtgag accctgaata 12720 12780 tttaaaaaca acaacaacaa caaaactcta tcaggatatc ataagtactt agagtgaaat acttgcatct gtaatagaga cttatttttt ttttttttga gacacagtct caccctgttg 12840 cccaggetgg agtgcagtgg tttgatetec getcaeggea acetecatet eccaggttca 12900 12960 agtgagttcc cattcctcag ccccagagct gggaccacag gcgcgcgaat ttttgtattt ttagcagaga cggggtttca ctatgttggc caggctagtc tcaaactcaa gttggcctca 13020 agtgatetge ceaccetgge gteceagtgt tgggatttea ggcatgagee actgtgeetg 13080 13140 gccatgtaat agagactttt aatataggag ggtgtaccag aagcaccagt ttcctgtggc

13200 aaacagaatt attcctgctg tatttgtaat ttggtgccac gaggtagccc agatcccttc 13260 agetetgatg gaagageatt getteageeg taaatggaca cetgeagaaa cettgeaceg atggatagtc tccctcagct ccgtgccatc gctgcagggg ctgttatgga catcactgca 13320 13380 gcccagtggc tetetetet ggtetecace atatgagttg gettetgttt eteteetgtt 13440 ttactttgcc tttagctgtg gtctttcaaa ccaccatccc tccttatctt cctctgctgg 13500 ttcctcagat cttcctctga tggcgctgcc tccatgccat gccctctgcc agttctatgt ggtgaacagt gagctgtcct gccagctgta ccagagatcg ggagacatgg gcctcggtgt 13560 gcctttcaac atcgccagct acgccctgct cacgtacatg attgcgcaca tcacgggcct 13620 gaaggtgggc tgtctcggga agggtgactt gccagcctac cacatgagct cttcagttct 13680 13740 ttaatatggg aaaacaaatt gcagagttta gtctctgatt agcttttaaa tttgatatgt gtaagtaaga catgaaccag cttttacttt gaaaccttcc ttttctggaa ggttttctgg 13800 13860 ccctgtggta tatgcactaa cagatctata caggttgttt gtgatacagc ttctatggat 13920 cttctcaaaa gctatgctga ggttgggtat ggtggctcat gcctgtaatc ccagcacttt ggaagactga gacaggagca attgcttgag gtctggagtt caataccagc ctgggcaaca 13980 14040 taacaagatg ctgttgctac aaaaaaatgg aaaagctaca ctaaattatt tttttaaaaa aagcettgeg gtgtetgeat attetaatgt ttttaaatga tgttttaaag aattgaaact 14100 14160 aacatactgt tctgctttct cccggtttat agccaggtga ctttatacac actttgggag atgcacatat ttacctgaat cacatcgagc cactgaaaat tcaggtaaga attagatgtt 14220 atacttttgg gtttggtacc ttctcttgat aaaaggttga ctgtggaaca ggtatctgct 14280 14340 caatgctgtg tccaagataa agatgactgc tccaaatgtg gggcttcagt ttagggagaa 14400 gtggtgggca ggtgggcagg acaaggcagg catctgcctc agcaaccatg gcacttaact 14460 tgtcaggtgc tgtgaggtac taagcaccag taccagagag ggaagagcca cattcaagcc aggggattgt ccaaaaggag gcattttaac tcattttaac ttgaaggaga attgaagtgc 14520 aaatgttttt ccttttcttt ttttttgaga tggagtcttt ctctgtcggc caggctggag 14580 14640 tgtgccgtgg tgcgatctca gctcactgca acctccacct cccgggttca agcaattctt ctgcctcagc ctcccaggta gctgggatta caggcacatg ccaccacacc cagctaattt 14700 tttgtattat tagtagagat ggggtttcgt catgttggcc aggctgatct caaactcctg 14760 14820 acttcaagtg taccacctgc ctcagcctcc gaaagttctg gaattacagg cataagccac caccctggcc ataaatattt tttgttaatt ttacattaag tacaatattt aggtccaaac 14880 14940 ttcaaaagtc tgttgaaatc cctgaagtta tagcagccaa caattgatat gaaatggcaa 15000 taaaaatgta agttcatctg cttcatgagc cttaaggaaa aaaactcaga accagacact 15060 ttttagcccc ttccaggtta gatccaggtt ttaaaagtta ttcctttgag ggagtttggc 15120 tgcttttgag tggaggtgac ttcaggctta ttctctctgg ctctctgctc tggtcatttt 15180 tagacatagt aataggttgt gacctgtctt cacatcctaa ttgccactgt ctgttcatcc caggaatcct ggctttcatc cctttctgtt cactgtccat gcatgtcatc tttccttctt 15240 tctgccaggg accagatggg ttagggattg tgaattcaag taaacgtaga gctactatga 15300 15360 gttacagatt gactgtgttc ctgtctttaa taaatttgcc aagagtggtt ataagaactt acacctgatg aggcaccagg ctcctgatgc tgtgtaatgt cacaaaatac ccctcactct 15420 cgatctgtgc aagagaacag ctggttgcgc tccaatcatg ttacataacc tacgcgaagg 15480 15540 tatcgacagg atcatactcc tgtaaaatag aactttgttg atcacatcct gtgtacttgt 15600 ttcacggaca tgaggagcaa ttacaacagg tcgtacaatt atggcaaaat aatggcctta 15660 ttttgttttt agcttcagcg agaacccaga cctttcccaa agctcaggat tcttcgaaaa gttgagaaaa ttgatgactt caaagctgaa gactttcaga ttgaagggta caatccgcat 15720 ccaactatta aaatggaaat ggctgtttag ggtgctttca aaggagctcg aaggatattg 15780 15840 tcagtcttta ggggttgggc tggatgccga ggtaaaagtt ctttttgctc taaaagaaaa aggaactagg tcaaaaatct gtccgtgacc tatcagttat taatttttaa ggatgttgcc 15900 actggcaaat gtaactgtgc cagttettte cataataaaa ggetttgagt taactcaetg 15960

```
agggtatctg acaatgctga ggttatgaac aaagtgagga gaatgaaatg tatgtgctct
                                                                  16020
tagcaaaaac atgtatgtgc atttcaatcc cacgtactta taaagaaggt tggtgaattt
                                                                  16080
                                                                  16140
cacaagctat ttttggaata tttttagaat attttaagaa tttcacaagc tattccctca
aatctgaggg agctgagtaa caccatcgat catgatgtag agtgtggtta tgaactttaa
                                                                  16200
agttatagtt gttttatatg ttgctataat aaagaagtgt tctgcattcg tccacgcttt
                                                                  16260
                                                                  16320
gttcattctg tactgccact tatctgctca gttccttcct aaaatagatt aaagaactct
ccttaagtaa acatgtgctg tattctggtt tggatgctac ttaaaagagt atattttaga
                                                                  16380
aataatagtg aatatatttt gccctatttt tctcatttta actgcatctt atcctcaaaa
                                                                  16440
tataatgacc atttaggata gagtttttt ttttttttt taaactttta taaccttaaa
                                                                  16500
                                                                  16560
gggttatttt aaaataatct atggactacc attttgccct cattagcttc agcatggtgt
gacttctcta ataatatgct tagattaagc aaggaaaaga tgcaaaacca cttcggggtt
                                                                  16620
aatcagtgaa atatttttcc cttcgttgca taccagatac ccccggtgtt gcacgactat
                                                                  16680
ttttattctg ctaatttatg acaagtgtta aacagaacaa ggaattattc caacaagtta
                                                                  16740
                                                                  16800
tgcaacatgt tgcttatttt caaattacag tttaatgtct aggtgccagc ccttgatata
gctatttttg taagaacatc ctcctggact ttgggttagt taaatctaaa cttatttaag
                                                                  16860
                                                                  16920
gattaagtag gataacgtgc attgatttgc taaaagaatc aagtaataat tacttagctg
                                                                  16980
attcctgagg gtggtatgac ttctagctga actcatcttg atcggtagga ttttttaaat
                                                                  17040
ccatttttgt aaaactattt ccaagaaatt ttaagccctt tcacttcaga aagaaaaaag
ttgttggggc tgagcactta attttcttga gcaggaagga gtttcttcca aacttcacca
                                                                  17100
tctggagact ggtgtttctt tacagattcc tccttcattt ctgttgagta gccgggatcc
                                                                  17160
                                                                  17220
tatcaaagac caaaaaaatg agtcctgtta acaaccacct ggaacaaaaa cagattttat
gcatttatgc tgctccaaga aatgctttta cgtctaagcc agaggcaatt aattaatttt
                                                                  17280
17340
                                                                  17400
ggctcactgc aacctccacc tcccaggttc aagtgattct cctgcctcag cctcccatgt
agctgggate acaggcacet gecaccatge ceggetaatt ttttgtattt tttgtagaga
                                                                  17460
                                                                  17520
cagggtttca ccatgttggc caggctggtc tcaaacacct gacctcaaat gatccacctg
cctcagcctc ccaaagtgtt gggattacag gcgtaagcca ccatgcccag ccctgaatta
                                                                  17580
                                                                  17640
atatttttaa aataagtttg gagactgttg gaaataatag ggcagaggaa catattttac
                                                                  17700
tggctacttg ccagagttag ttaactcatc aaactctttg ataatagttt gacctctgtt
ggtgaaaatg agccatgatc tcttgaacat gatcagaata aatgccccag ccacacaatt
                                                                  17760
                                                                  17820
gtagtccaaa ctttttaggt cactaacttg ctagatggtg ccaggttttt ttgcacaagg
agtgcaaatg ttaagatctc cactagtgag gaaaggctag tattacagaa gccttgtcag
                                                                  17880
                                                                  17940
aggcaattga acctccaagc cctggccctc aggcctgagg attttgatac agacaaactg
aagaaccgtt tgttagtgga tattgcaaac aaacaggagt caaagcttgg tgctccacag
                                                                  18000
                                                                  18060
tctagttcac gagacaggcg tggcagtggc tggcagcatc tcttctcaca ggggccctca
                                                                  18120
ggcacagett acettgggag gcatgtagga agecegetgg ateateaegg gataettgaa
atgctcatgc aggtggtcaa catactcaca caccctagga ggagggaatc agatcggggc
                                                                  18180
aatgatgcct gaagtcagat tattcacgtg gtgctaactt aaagcagaag gagcgagtac
                                                                  18240
cactcaattg acagtgttgg ccaaggctta gctgtgttac catgcgtttc taggcaagtc
                                                                  18300
cctaaacctc tgtgcctcag gtccttttct tctaaaatat agcaatgtga ggtggggact
                                                                  18360
ttgatgacat gaacacacga agtccctctg agaggttttg tggtgccctt taaaagggat
                                                                  18420
                                                                  18480
caattcagac tctgtaaata tccagaatta tttgggttcc tctggtcaaa agtcagatga
atagattaaa atcaccacat tttgtgatct atttttcaag aagcgtttgt attttttcat
                                                                  18540
atggctgcag cagctgccag gggcttgggg ttttttttggc aggtagggtt gggagg
                                                                  18596
```

<sup>&</sup>lt;210> 125 <211> 3493 <212> DNA

<sup>&</sup>lt;212> DNA <213> Homo sapiens

<sup>&</sup>lt;400> 125

agcggccggg	gccacgatgg	agcgcgacgg	ctgcgcgggg	ggcgggagcc	gcggcggcga	60
	gctccccggg					120
	gcgcccgggg					180
	ccgctggaga					240
taaagtactc	tcgctggtat	tgtcagtatg	tgtgttaaca	acaatacttg	gttgtatatt	300
tgggttgaaa	ccaagctgtg	ccaaagaagt	taaaagttgc	aaaggtcgct	gtttcgagag	360
aacatttggg	aactgtcgct	gtgatgctgc	ctgtgttgag	cttggaaact	gctgtttaga	420
ttaccaggag	acgtgcatag	aaccagaaca	tatatggact	tgcaacaaat	tcaggtgtgg	480
tgagaaaagg	ttgaccagaa	gcctctgtgc	ctgttcagat	gactgcaagg	acaagggcga	540
ctgctgcatc	aactacagtt	ctgtgtgtca	aggtgagaaa	${\tt agttgggtag}$	aagaaccatg	600
tgagagcatt	aatgagccac	agtgcccagc	agggtttgaa	acgcctccta	ccctcttatt	660
ttctttggat	ggattcaggg	cagaatattt	acacacttgg	ggtggacttc	ttcctgttat	720
tagcaaacta	aaaaaatgtg	gaacatatac	taaaaacatg	agaccggtat	atccaacaaa	780
aactttcccc	aatcactaca	gcattgtcac	cggattgtat	ccagaatctc	atggcataat	840
cgacaataaa	atgtatgatc	ccaaaatgaa	tgcttccttt	tcacttaaaa	gtaaagagaa	900
atttaatcct	gagtggtaca	aaggagaacc	aatttgggtc	acagctaagt	atcaaggcct	960
caagtctggc	acatttttct	ggccaggatc	agatgtggaa	attaacggaa	ttttcccaga	1020
catctataaa	atgtataatg	gttcagtacc	atttgaagaa	aggattttag	ctgttcttca	1080
gtggctacag	cttcctaaag	atgaaagacc	acacttttac	actctgtatt	tagaagaacc	1140
agattcttca	ggtcattcat	atggaccagt	cagcagtgaa	gtcatcaaag	ccttgcagag	1200
ggttgatggt	atggttggta	tgctgatgga	tggtctgaaa	gagctgaact	tgcacagatg	1260
cctgaacctc	atccttattt	cagatcatgg	catggaacaa	ggcagttgta	agaaatacat	1320
atatctgaat	aaatatttgg	gggatgttaa	aaatattaaa	gttatctatg	gacctgcagc	1380
tcgattgaga	ccctctgatg	tcccagataa	atactattca	tttaactatg	aaggcattgc	1440
ccgaaatctt	tcttgccggg	aaccaaacca	gcacttcaaa	ccttacctga	aacatttctt	1500
acctaagcgt	ttgcactttg	ctaagagtga	tagaattgag	cccttgacat	tctatttgga	1560
	caacttgcat					1620
tggctctgac	aatgtatttt	caaatatgca	agccctcttt	gttggctatg	gacctggatt	1680
	attgaggctg					1740
	ttgacaccgg					1800
	gtttatacgc					1860
cttcacaaga	aaccccagag	ataaccttgg	ctgctcatgt	aacccttcga	ttttgccgat	1920
	caaacacagt					1980
	tatggaagac					2040
	tttatgagtg					2100
	agaaatgaca					2160
	cctcttagtc					2220
	ttcctctccc					2280
_	actacaaata					2340
_	accctactgc					2400
	tttgactttg					2460
	gtcatccgta					2520
	aaagatacat					2580
	cctcacagga					2640
	gaagaattgt	_				2700
	agcttctatc					2760
_					aaacaccatg	2820
aatctttttg	agagaacctt	atattttata	tagtcctcta	gctacactat	tgcattgttc	2880

agaaactgtc gaccagagtt	agaacggagc	cctcggtgat	gcggacatct	cagggaaact	2940
tgcgtactca gcacagcagt	ggagagtgtt	cctgttgaat	cttgcacata	tttgaatgtg	3000
taagcattgt atacattgat	caagttcggg	ggaataaaga	cagaccacac	ctaaaactgc	3060
ctttctgctt ctcttaaagg	agaagtagct	gtgaacattg	tctggatacc	agatatttga	3120
atctttctta ctattggtaa	taaaccttga	tggcattggg	caaacagtag	acttatagta	3180
gggttggggt agcccatgtt	atgtgactat	ctttatgaga	attttaaagt	ggttctggat	3240
atcttttaac ttggagttto	atttctttc	attgtaatca	aaaaaaaat	taacagaagc	3300
caaaatactt ctgagacctt	gtttcaatct	ttgctgtata	tcccctcaaa	atccaagtta	3360
ttaatcttat gtgttttctt	tttaattttt	tgattggatt	tctttagatt	taatggttca	3420
aatgagttca actttgaggg					3480
tgtatttgta ttt					3493
<pre>&lt;210&gt; 126 &lt;211&gt; 836 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 126					60
gtgaaacacc ctcggctggg					60
catggtgcgg actaaagcag					120
agccccaga aaggtgcttg					180
gaggaaagct gaaaataaat					240
gtggcaaaaa ggaattggag					300
tcagattcct gaagaggcag					360
tttgcaacct gatcacacaa					420
aacgtctcct tgtttaccct					480
aattagcttt gttgaacagg	g catttaatta	aaaaatttag	gtttaaattt	agatgttcaa	540
aagtagttgt gaaatttgag					600
atataatgca ttgtttggtt					660
gtcattgcat tgtgttctaa	ı ttacaagtat	gttgtatttg	agatttgctt	agattgttgt	720
actgctgcca tttttattgg	, tgtttgatta	ttggaatggt	gccatattgt	cactccttct	780
acttgcttta aaaagcagag	, ttagattttt	gcacattaaa	aaattcagta	ttaatt	836
<210> 127 <211> 4203 <212> DNA <213> Homo sapiens <400> 127					
tgačáacatg geggegece	ı tggtccgtgg	cccggcagtg	ctcgcctaaa	ggtggagaac	60
gaggagtaga ggaggccgca	a gccagagcct	gtgagcagat	ccagacctac	agataaaaaa	120
cattatttaa tctatctggg	g atttactccg	gcttatgatt	tgagggcctt	ctcaccttct	180
gaagaatggc ttctgtttgg	g cagagattgg	gtttttatgc	ctctcttctg	aaaagacagc	240
taaatggtgg gccagatgto	atcaagtggg	aaaggagagt	aattcccgga	tgtaccagaa	300
gcatctacag tgccacggga	a aagtggacaa	aagagtatac	attgcagaca	agaaaggatg	360
ttgagaaatg gtggcatcaa	a cgaataaaag	aacaggcctc	caaaatttca	gaagctgata	420
aatcgaagcc aaaatttta	gtgctttcca	tgttccctta	teettetggt	aagctgcaca	480
tgggccatgt gcgtgtctad	c accatcagcg	acaccatagc	acggttccag	aagatgagag	540
ggatgcaggt catcaaccc	atgggatggg	atgcttttgg	attgcctgct	gaaaatgccg	600
cagtcgagag gaatctaca	ccacaaagtt	ggacacaaag	taatattaaa	cacatgagga	660
aacagcttga tcgtctggg	ctgtgtttca	gctgggatag	ggaaataact	acgtgtttgc	720
cagattacta caagtggact	cagtatctct	ttattaaact	gtatgaggct	gggctggcct	780
atcaaaagga ggccctggt	: aactgggacc	cagtggatca	aacagtgctt	gccaatgagc	840
aggtggatga acatggctg	tcatggcgtt	ctggagcaaa	ggtggaacag	aagtacctca	900

960 gacaatggtt tattaagaca accgcttatg caaaggccat gcaggacgcg ttggcagacc 1020 ttccagaatg gtatggaata aaaggcatgc aagcccactg gattgggggac tgtgtgggct 1080 gccacctgga cttcacatta aaggttcatg ggcaagccac gggcgaaaag ctgactgcct atacggccac ccctgaagcc atttatggca cctcccacgt ggccatctcg cccagccaca 1140 gactectaca tgggcacage tetetgaagg aageettgag gatggeeett gteeetggca 1200 1260 aagattgeet cacgeetgta atggetgtga acatgettae ceageaggag gteeetgteg ttattttggc caaagctgac ttggaaggct ctctggattc aaaaatagga attcccagta 1320 1380 ctagctcaga ggacaccatc ttagcccaaa ccctgggcct ggcctactct gaagtcattg aaactttgcc agatggcaca gagagactga gcagctctgc tgagttcaca ggtatgaccc 1440 1500 ggcaggatgc ttttctagcc ctgactcaga aagcccgggg gaagagagtg ggtggagacg 1560 tgacaagtga taaactgaaa gactggctga tttcacggca gcggtactgg ggcacaccaa tececattgt ecaetgeeca gtetgtggee ceaeacetgt geecetggag gaettgeetg 1620 1680 tgaccetgee caacategeg tettteactg geaagggagg cececeactg gecatggett cagagtgggt gaactgctcc tgcccaaggt gcaagggagc agccaagaga gagacagaca 1740 1800 cgatggatac ctttgttgat tctgcttggt actacttcag atacactgac cctcataatc cacacagece ttttaacaca geagtggeeg attactggat geetgtggat ttgtacattg 1860 1920 gagggaaaga acatgccgtc atgcacttgt tctatgcaag attctttagt catttttgcc 1980 atgatcaaaa aatggttaaa catagggagc cttttcataa gctgctggcc caaggcctta tcaaggggca gacattccgc ctaccatctg gacagtatct acagagagag gaagtggatc 2040 tcacaggttc cgttcctgtt catgcaaaaa cgaaagagaa gttagaggtg acgtgggaga 2100 2160 agatgagtaa gtccaaacac aacggggtgg acccagagga agttgtggag cagtatggga tegacaegat teggetetae atcetttttg etgeceetee tgagaaggat atettgtggg 2220 2280 atgtgaaaac tgatgctctc cctggggtgc tgagatggca acaacgactg tggaccttga 2340 caactcggtt tattgaggcc agggcttctg ggaagtctcc ccagcctcag ctgctgagta 2400 acaaggagaa agctgaggcc aggaagctct gggagtacaa gaactccgtc atctctcagg 2460 tgaccaccca tttcacagag gacttctcac tgaattctgc aatttctcag ctgatgggac tcagcaatgc cctctcgcaa gcctctcaga gcgtcattct ccacagcccc gagtttgagg 2520 2580 atgetttgtg tgeeetgatg gtaatggetg etceaetgge eeetcatgta aceteagaga tctgggcagg cctggcgctg gtgccgagga agctctgtgc ccactacact tgggatgcca 2640 2700 gtgtgctgct ccaggcatgg cctgctgtgg acccggagtt cctgcagcag cctgaggttg 2760 tccagatggc agttctgatc aacaataaag cttgtggcaa aattcctgtg ccccaacaag ttgcccggga ccaggacaaa gtccacgaat ttgttcttca aagcgagctg ggtgtcaggc 2820 2880 ttttgcaagg acgaagcatc aagaagtcct tcctttcccc gagaactgcc ctcatcaact 2940 tectggtgca agattgacag ecaggagget geagetacea egagggeete tgaggaacet 3000 ccttccaggc ctgggatgag ggggcgatgt ctgctggccc aggggaaggg aaaagacaaa 3060 tgtcttgact gttgacctcg gtcctgtggc agactgcagt caacagtgtg cctctgtagt 3120 gtggcctggt gctggggtga aggtgagctg ggcaaaggag aaatatgagc tactgaggag 3180 ggggttggac atcctgcccc tcacccccca cccacactgc aggtagagga ggccatctga tcccatggga agccatcaga gacactgctg gtgggagcag gaaggagcag tgcccctcga 3240 3300 gcagccagga agcctgcgga tctgggaaat ggctctgcct taggcacttc tcgggaattt 3360 gaggccagcc tgaggaactg caggactcag gtgcaatgtg ccagccactt ggaactgcta 3420 actgagecte cagatggtag tgaatggtet etttgeette aggetggatg aggaagteat ttaggaaatg ttcaaataac caatatgtgg aaatggacac agggatcttc tgaagttgct 3480 ttgaatcaaa aggcaggcag tgctggttcc tctgcctgtg tccccaccac tccccagctc 3540 3600 tgtcatgcag gcctgtcctc cccaacccca gctggatgtg cctcccaggc ctgctgtggt 3660 tetgacacae aggateecag geaaggeace actteeteae atgaatgagg ageageaagt cataaccact cccttgggta tacaatttgc tgtgtagtga agtggaacca ggctcaggct 3720 gctggtccca acctcagagc cccaccgcag cccagtaggg atgcagcacg ccccagaggg 3780

aggaagagca gtccaagcca cacattaggc acctaagcca	ccccagatgg agctcaccac cagcggtctg taatcctggt ctgattaata tctatatatg	agaggagtgg gctgttggga tttatgtgaa tttaatgagg	aactgaggcc agatggccag gtcagcaatt gaaggtaggg	ccccagatgt gaatggactc aagtgttccc gagaatctag	tgcctccggt ataccattgg actagaactg ccattttata	3840 3900 3960 4020 4080 4140
cccctgcag atg <210> 128 <211> 906	ttcagcagtt					4200 4203
	sapiens					
	aaactgctgg					60
	gcgatggcct					120
	aatggaatca					180
	tatgcaaaat					240
	agtgctccac					300 360
	gctaaagctc					420
	gttggatgta gtaaataatg					480
	gtgggggatg					540
	gctgcagccc					600
	atattgcctg					660
	gatggcagca					720
<del>-</del>	gaaaagcagt					780
	caagtgaaag					840
gttgtcacct	ttatgctcct	ccattataac	gtcagaaatt	cattacatta	aaaatgtgaa	900
aaatgt						906
	o sapiens					
	ttgttgccgc	gaggggtagg	agtgggcgtg	gcggagccag	ctccgttcgg	60
aacactcccg	ggccgacccg	actcgctcat	cctgcaggag	ctgcggcgcc	aagatgagtg	120
	cccagccagc					180
	gcaccatcgg					240
	ctccttggtc					300
	tgcacttaac					360
	tggggagctg	_				420
	cggacacaca					480 540
	gcgacagccc cccacttcgg					600
					cactcagatg	660
	ccatcatgac					720
					cagggccaag	780
	gctggagccc					840
ctccttcctc						852

<210> 130

<211> 5404 <212> DNA <213> Homo sapiens

<400> 130 cctgtgttac atctggaagc aagcagtgct gctgacggtg tgagtgctgc atgggaggag 60 120 gtggctggcc accacgcaga ccgtggcccg cagggatcgg atgccaatgg tgatggtgac 180 cagggccatg agaatgccgc attgccagac ccgcaggagt cggacccagc agacatgaac getetegete tgggteeete agaatatgae tetetgeetg aaaatagega gacaggagga 240 300 aatgagtctc aaccagacag ccaggaagac ccccgagaag tacttaaaaa aacattggaa ttctgcttat ctagggagaa ccttgctagt gacatgtatc ttatatcaca gatggatagt 360 gaccagtatg tgccaatcac aacggtggct aacctcgacc acatcaagaa gctcagcact 420 gatgtggact tgattgtgga agtgctaaga tctttacctt tagtccaagt ggatgaaaag 480 540 qqaqaaaaag taaggccaaa tcaaaatcgc tgcatagtaa tattgcgtga aatatctgaa 600 tctacccccg tggaagaagt agaagcacta tttaaaggag ataatttacc aaaatttata aactgtgaat ttgcatataa tgataattgg tttattacat ttgaaacaga agctgatgca 660 caacaggctt acaaatacct tcgagaagaa gtcaaaactt ttcaaggaaa accaattaag 720 gcacggataa aagcaaaggc aatagctata aacacatttt tgccaaagaa tggatttaga 780 840 cccctggacg tgagcctgta tgcccagcag cgctacgcga cgtcgttcta cttccctccc 900 atqtacagcc cccagcagca gttccccctg tacagcctga tcactcccca gacgtggtca gcaacgcaca gctatcttga cccacccttg gtaactccat ttccaaatac tggatttata 960 aatgggttta cgtctccagc gttcaagcct gcggcgtctc ctctgacttc tctcagacag 1020 1080 tatcctcctc gaagcaggaa tcctagtaaa tctcatctgc ggcatgcgat tcctagtgca gagaggggac ctgggttatt agaaagtcct tcaatattta acttcactgc agatcgatta 1140 attaatggtg tccggagtcc acaaacaagg caagcaggtc aaactagaac acggattcaa 1200 1260 aaccettcag catatgecaa gagagagget gggeetggge gtgtggagee aggeagtete gaatcctctc ctggtttagg gaggggaagg aagaattcct ttggctaccg gaagaaaagg 1320 1380 gaggagaagt ttacaagcag ccagacacag tctccaacgc caccaaagcc tccgtcgcca 1440 agettegage tggggetgte cagetteeet ccattacetg gagetgeegg caatttgaag acagaggact tgtttgaaaa caggctatct agcttgataa taggaccatc caaagaaagg 1500 accetcagtg cagacgcaag cgtgaacace ettectgtag tggtetecag agageceteg 1560 gtgccggctt cttgtgctgt atcagcaacg tacgagcgat ccccctcccc agctcattta 1620 1680 cccqatqatc ccaaggtggc ggagaaacag agggaaaccc acagtgtgga cagacttcct tecgecetea etgegacege gtgtaaateg gtgcaggtga aeggageege eaeggaattg 1740 1800 cgaaagccca gctacgcaga gatttgtcag agaacgagta aagagcctcc ttcttcccca 1860 ttgcaacccc aaaaagaaca aaagccaaac actgttggtt gtgggaagga ggaaaagaag 1920 ctggcagagc ccgcagagag ataccgggag cccccagccc tcaagtccac acctggagcc 1980 cccagagacc agaggcggcc ggcggggggc cggccctcgc cctcggccat ggggaagcgt ctcagccgag agcagagcac tccccccaag tctcctcagt gaaaaccgta cgtctgggag 2040 2100 gggtcgcaga gcgctgtgtt aaccacaaac gagacactct cccactcagt gcgagggcga gccgctggtt aggagcttgc agtgtctgag gcctgtggga tcctcaagtt ggttttcttc 2160 tgtgagttgg attctccccc tcttgaaaaa aaatcgattt ttcaggattt aattaataca 2220 aaccttattt taggttggtg cttaactgga ggtgatgcat aagtctgatt tttttttcca 2280 2340 agatagaaaa agcatttatc ctaacaaatt ggtatttttt attaagcctc catgtggctc tgaatgcaag ctatatatag tgagtttttc taaattaagg gaactctgct ttttttttt 2400 ttttttaagt aactggtctg taagtgcata tctctagaac gtccccgcag atgaatgagg 2460 2520 gccagtggcc ttggcagagg caggtgtggc ctcgtagagg cagtgctggc cgcgccaggg catcagtgct gatgtgggag ctgtgcttcc acctaagccg ttggtagggg actgtggcat 2580 2640 ttaagaatgt agagagegea teetttttga teteetggge ggagtgaace tgeaggggee accccagaaa ccttggttct gatgcactgc aagcaagtaa ccagcttctc actccagttt 2700

caagtggcta ttatgtaata taaattcaaa gcacattgtg aatagaacct acatgaaaac 2760 2820 atacactttg ttgcccactg acatgttacc agaagttgta ccatgatgtt gttttgaccc 2880 ctqtqaqctq atggccccgq ccctqctctq tgcacatttc tgtccgtgtt ccccagcact 2940 ctggttggag agagtccaca tcttcagctc cgtgtggaca tctccctgta cctctgcatc agcacatgga tttaagagtt atgtaatcgt gagagaatgg tgtttgtggt ttttccccct 3000 ctttggctgg tggaggataa agttcctgct cttttacctc caagacgagg gcctcattga 3060 3120 ttcacttcca gaagtgctgc acttctgaag aacaaggatg cactaaagtt agcaagttta taataaagtt aaatataaat tattttgttt taaaatgcct caaatttttc tttattctaa 3180 3240 qcaqcaaaca ttaaaataag aatatttcct gctaaatgta accatacact ttattccaca aaatgttatt taacaagact gagggttttt tttaagaaaa aattatttcc atccaatatt 3300 3360 taaaqacttq aattttattt aaacttgaaa atgactttgc cttaactttt gtataagaca gcttagagtc catggagccc ggccctgggt tggcgtgagt gggtcagagt tactcagtta 3420 3480 ctgcgtggat ctcctgtcgc tagttttact gagtaagcat actgtagtac aagagctagt agtagttttt gtaatatacc ttaaagatct tcaacagttg atctttttc agaatgttgg 3540 3600 aaaatcctgt aaatgcaaat agtcaatact gtattaaata cgtgcacttg gagtgtgctt 3660 cgcttgtaca gttgtaaata atcagaacat atgaaaaagg taccctacag agaaaattct 3720 gatacagatt attgatatat tataaatgtt gctgttgagc gggatgtaga taaactaaat 3780 gttgtggttt gaatattatt ttgatttgtt gagattttct tttttctctt acatcggtgt 3840 gttgaactga ttctgcctct ttgctgcaaa agggaattgg aaagtcttat taaaagcctc cagatgtttt catactcttt taaaatgtat gtaaatgcat actaatcata tctaatgtga 3900 3960 aagagtttta aagtatatag agagcaaaaa ctggcaggat cgtaagtgaa ggtgactagt aatctaattt aaatcacctg cagctaagca tgattgaccc tgccagagga aaacatgcct 4020 atttgaccat ttcctttaaa gcagttgcca ttattcaaat acagagaaat agccacaggg 4080 4140 ctagtgtttt tcaaatgcat tttaaagaac atggggattt ttttttgtag ttgtcagttc actgaccaaa aaaaaaaaa aaatcagaaa taattgatct gtgaaaccca aactctcaat 4200 4260 actcaqaaaq ctgggaggca acctcgaggc ctgggcctac gagctgcatc ttcgctacgg aagggccagg gcgccatcag ccattcccaa aacacaaggc ctgcccgtcc gccagtgagt 4320 4380 ccttggtttt taataatgag aagtcctttc ccccaaggtg tgagcattgc agcgcagtgt gtgtgtgtgg ttagagccag cttagtcctt cactttgtcg accgaagtgg gagctcaaca 4440 4500 gctgcatgag gagggcagcg cgtgcattag ccagtcgcca ctggagggct ctgctgccct 4560 ccggtcaata cactgtagtt actgcctagc cagcagcagt cttctgcatc aagaactgaa accttgctcg gaggtgattt ttatagcatc ctttttaatt aaaggtgaaa tacagattgc 4620 4680 tatataatqt ctqaaaaaac ctqatactac ttcaagagtt tctgctcaga agaaaatgag agttatcata ataggaagct gtggcggtcc atgccaactg tgctgtgtca catacagcga 4740 4800 tgagagtggc tttcatactt tttttttttt taagttaaca ccctccttta cccccagcag 4860 tatctcaggt tatagaatca gagatgcagc agtgacaaat ggcattttaa cttgtaaaat 4920 cgtgtgatga tgcttatcat tttgaaatag aagaataaaa acctggtccc gtttcaccag 4980 acatgaattt caagtggagt cgtcgttctc tgagagtgag tgtcttgaca ttttcaccca ggccctcctg tcatcacatc accggctgtc actggcgggt ggccgtaaac gtcctgcgtt 5040 5100 gctatattag gatctctgca gttcaggctt caaaaccagt tcagtgtatc cgggcgacgg 5160 gtagtggtgg tgcatgcctg tctgtgtgcc ccgctggcga gctgtagttg cggcttgcgt 5220 gcctcgcggc ccactacagg gctgcagaca atcgaggcga gggcgctggc cgccagcagc tcacagcgcg ggggtcatgt ggtcgctcct cgagggtttc gtttttgttc tgcttcatta 5280 5340 agactggaat caagcttaca tgtaaactat tggtaattta agtttccttt tgtgtcattc 5400 agtgtaaaac tgtctaattt gaaaaaaaat gtaggttatg aaaataaaga tttaggcact 5404 gttc

<210> 131 <211> 4121

## DNA Homo sapiens

acaatgtggt cocgaagogg coagogoogg gagotgoago gotgagacoo coagooogoo 60 120 ccctcgggct cccggccggg gccccatcat gttctccagg aagaaacgag agctcatgaa aaccccttcc atctcgaaaa agaaccgcgc gggaagcccc agcccgcagc cctcggggga 180 gctgcccagg aaggatgggg ctgacgcggt gttccccgga ccaagcctgg agccgcccgc 240 tgggtcctcc ggcgtcaagg ccacagggac cctcaagcgg cccaccagcc tgagccgcca 300 cgccagcgcg gctggcttcc ccctgtcggg tgctgcctcc tggacactgg gccggagcca 360 ccggagccca ctgacagccg ccagcccggg cgagctgccc accgagggtg ccggcccgga 420 cgtcgtcgag gacatctccc atctgctggc ggacgtggcc cgcttcgctg agggccttga 480 gaaacttaag gagtgtgtgt tgcgtgacga cctccttgag gcccgccgcc cgcgggccca 540 cgagtgcctg ggtgaggctc tgcgtgtcat gcatcagatc atctccaagt acccgctgct 600 660 gaacaccgtg gagacgctca ccgcagccgg caccctcatt gccaaggtca aagccttcca 720 ttatgagage aacaatgate tggagaaaca ggagttegag aaggeeetgg agaegattge 780 tgtggccttc agtagcacag tgtccgagtt cctcatgggt gaagtggaca gcagcaccct 840 cctagcagtg cctcctgggg actcgagcca gtccatggaa agcctgtatg gaccgggcag 900 tgagggcacg cctcccagcc tggaagactg tgacgccggc tgcctgcccg ccgaggaggt 960 ggacgtgctg ctacagcgct gtgagggggg cgtggatgcc gcactgctgt atgccaagaa 1020 catggccaag tacatgaagg acctcatcag ctacctggag aagcggacga cgctggagat 1080 ggagtttgcc aagggcctgc agaagatcgc tcacaactgc agacagagcg tcatgcagga 1140 gececaeatg eegeteetgt eeatetaete getggeeetg gageaggaee tggagttegg ccacagcatg gtgcaggcgg tgggcacctt gcagacccag accttcatgc agcccctgac 1200 1260 cctgcggcgg cttgaacacg agaagcgcag gaaggagatc aaggaggcct ggcaccgtgc 1320 ccagaggaag ctgcaagagg cggagtccaa cctgcgcaag gccaagcagg gttacgtgca 1380 gcgctgcgag gaccacgaca aggctcgctt cctcgtggcc aaggcggagg aggagcaggc 1440 tqqcaqcqcg ccgggagcag gcagcacggc caccaagacc ctggacaagc ggcggcggct 1500 ggaggaggag gccaagaaca aggcggagga agctatggcc acctaccgca cctgcgtggc 1560 cgacgcgaag acgcagaagc aggagctgga ggataccaag gtgacggcgc tgcggcagat 1620 ccaggaggtc atccggcaga gcgaccaaac catcaagtcg gccacgatct cctactacca 1680 gatgatgcat atgcagacgg cgccgctgcc cgtgcacttc cagatgctgt gtgagagcag 1740 caagetgtat gacceaggee ageagtaege eteceaegtg egecagetge agegggaeea 1800 ggagecegat gtgeactaeg actttgagee ceaegtetee geeaaegeet ggteeeeegt 1860 catgcgtgcc cggaagagca gcttcaacgt gagtgatgtg gcgcggccgg aggctgccgg gagecececa gaagaaggeg ggtgeaetga gggeaeaeet geeaaggaee acagggeegg 1920 1980 gcgaggacac caggttcaca agtcatggcc gctctcgatc tcagactcgg acagtgggct 2040 ggaccccggc cctggcgcag gggactttaa gaagttcgag cggacgtcat ccagtggtac 2100 catgtcgtcc acggaggagc tggtggaccc agacggtgga gccggggctt cagcctttga 2160 gcaggctgac ctcaacggca tgacccccga gctgccggtg gccgtgccca gtggaccgtt ccgccacgag gggctgtcca aggcggcccg tactcaccgg ctccggaagc tccgcacgcc 2220 cgccaagtgc cgcgagtgca acagctacgt ctacttccag ggtgctgagt gtgaagagtg 2280 2340 ctgcctggcc tgccacaaga aatgtctgga gacgctggcc atacagtgcg ggcacaagaa 2400 gctgcaagge cgcctgcage tgttcggcca ggacttcage cacgcggccc gcagcgcccc cgacggcgtg cccttcatcg tcaagaagtg cgtctgcgag atcgagcggc gggcgctgcg 2460 2520 caccaagggc atctaccggg tcaatggggt aaagacacgc gtggagaagc tgtgccaggc 2580 cttcgagaac ggcaaggagc tggtcgagct gtcgcaggcc tcgccccacg acatcagcaa 2640 egtecteaag etetacetge gteagettee egageegete ateteettee geetetacea 2700 cgagctcgta gggctggcca aggacagcct gaaggcagag gccgaggcca aggcggcgtc 2760

ccggggccgg caggacggct cggagagcga ggcagtggcg gtggccctgg caggtcggct

```
gegggagete etgegggaee tgeegeetga gaacegggee tegetgeagt acetgetgeg
                                                                     2820
                                                                     2880
tcacctacgc aggatcgtgg aggtggagca ggacaacaag atgacccccg ggaacctggg
categtgtte gggcccaege tgetteggee aeggeceaee gaggecaeeg tgteeetete
                                                                     2940
                                                                     3000
ctccctggtg gattatcccc atcaggcccg cgtcatcgag actctcatcg tccactacgg
cctggtcttc gaggaggagc cggaggagac ccccgggggc caggacgagt catccaacca
                                                                     3060
                                                                     3120
gcgagctgag gtagtcgtcc aggtgccgta cctggaggcg ggcgaggcgg tggtctaccc
                                                                     3180
gctgcaggag gcggcggcgg acgggtgcag agaatcccga gttgtgtcca acgattcgga
                                                                     3240
cteggaceta gaggaggeet eegagetget gteeteateg gaggeeagtg ceetgggeea
cctcagcttc ctggagcagc agcagagcga ggccagccta gaggtggctt ctggcagcca
                                                                     3300
                                                                     3360
cagcggcagt gaggagcagc tggaggccac agcccgggag gacggggacg gggacgagga
cggcccggcc cagcagctct caggattcaa caccaaccag tccaacaacg tgctgcaggc
                                                                     3420
                                                                     3480
cccactgccc cccatgaggc tccgtggcgg gcggatgaca ctgggctcct gcagggaaag
                                                                     3540
gcagccggaa ttcgtgtgag ctggggtggg gctgggacca caggtggctt ctctcttgcc
                                                                     3600
tgeteetgte eeteeageae gteeeetgea eeaeggeata gettaggtge geegteetgg
                                                                     3660
ggtcgctgcc gagagcgcct ggacttcgac gtcccaccag cgggcgcctc ctcccagagg
                                                                     3720
cttccaggag cacgagggcc ttgcggcaca ggactgtgcc ctgtgctgtc ccctgcaccc
                                                                     3780
cggctcagct gagctgggga acactgctgt cgtgtgaagt cacagtggcc ttgttggtgc
ccacaggget gtgtggatgg aggaagetgt ccctgeccag tgcatcecce aggteatcac
                                                                     3840
ggggacgcag gaggcaggcc ctgccctgcc ctctcctcac aggtctgttg cagggactcc
                                                                     3900
agaaaccatt ctgggagccg tggatggggg cggagctggg gtttggtgca gtttccaggg
                                                                     3960
tgcagtacag cagggcctga atactggccc tggactccct tttccagaac accaggtgtg
                                                                      4020
gccacctggg gctcaggtac acagtggggt ctctcggaag ccaccgtgtg gttctttcac
                                                                      4080
aggcacgttt attttgctga aataaaaagt ttttaatcgg g
                                                                      4121
       132
4792
DNA
Homo sapiens
<\!400\!>-132 ggaccacca gtaccgatcc cttcacgacc gtcaccatgg aagtgtcacc attgcagcct
                                                                        60
gtaaatgaaa atatgcaagt caacaaaata aagaaaaatg aagatgctaa gaaaagactg
                                                                       120
tctgttgaaa gaatctatca aaagaaaaca caattggaac atattttgct ccgcccagac
                                                                       180
                                                                       240
acctacattg gttctgtgga attagtgacc cagcaaatgt gggtttacga tgaagatgtt
                                                                       300
ggcattaact atagggaagt cacttttgtt cctggtttgt acaaaatctt tgatgagatt
                                                                       360
ctagttaatg ctgcggacaa caaacaaagg gacccaaaaa tgtcttgtat tagagtcaca
attgatccgg aaaacaattt aattagtata tggaataatg gaaaaggtat tcctgttgtt
                                                                       420
                                                                       480
gaacacaaag ttgaaaagat gtatgtccca gctctcatat ttggacagct cctaacttct
                                                                       540
agtaactatg atgatgatga aaagaaagtg acaggtggtc gaaatggcta tggagccaaa
                                                                       600
ttgtgtaaca tattcagtac caaatttact gtggaaacag ccagtagaga atacaagaaa
                                                                       660
atgttcaaac agacatggat ggataatatg ggaagagctg gtgagatgga actcaagccc
ttcaatggag aagattatac atgtatcacc tttcagcctg atttgtctaa gtttaaaatg
                                                                       720
                                                                       780
caaagcctgg acaaagatat tgttgcacta atggtcagaa gagcatatga tattgctgga
                                                                       840
tccaccaaag atgtcaaagt ctttcttaat ggaaataaac tgccagtaaa aggatttcgt
                                                                       900
agttatgtgg acatgtattt gaaggacaag ttggatgaaa ctggtaactc cttgaaagta
atacatgaac aagtaaacca caggtgggaa gtgtgtttaa ctatgagtga aaaaggcttt
                                                                       960
cagcaaatta gctttgtcaa cagcattgct acatccaagg gtggcagaca tgttgattat
                                                                     1020
gtagctgatc agattgtgac taaacttgtt gatgttgtga agaagaagaa caagggtggt
                                                                     1080
                                                                     1140
gttgcagtaa aagcacatca ggtgaaaaat cacatgtgga tttttgtaaa tgccttaatt
                                                                     1200
gaaaacccaa cctttgactc tcagacaaaa gaaaacatga ctttacaacc caagagcttt
ggatcaacat gccaattgag tgaaaaattt atcaaagctg ccattggctg tggtattgta
                                                                     1260
```

1320 gaaagcatac taaactgggt gaagtttaag gcccaagtcc agttaaacaa gaagtgttca 1380 gctgtaaaac ataatagaat caagggaatt cccaaactcg atgatgccaa tgatgcaggg ggccgaaact ccactgagtg tacgcttatc ctgactgagg gagattcagc caaaactttg 1440 1500 gctgtttcag gccttggtgt ggttgggaga gacaaatatg gggttttccc tcttagagga aaaatactca atgttcgaga agcttctcat aagcagatca tggaaaatgc tgagattaac 1560 1620 aatatcatca agattgtggg tcttcagtac aagaaaaact atgaagatga agattcattg aagacgette gttatgggaa gataatgatt atgacagate aggaccaaga tggtteccae 1680 1740 atcaaagget tgetgattaa ttttateeat cacaactgge cetetettet gegacategt tttctggagg aatttatcac tcccattgta aaggtatcta aaaacaagca agaaatggca 1800 ttttacagcc ttcctgaatt tgaagagtgg aagagttcta ctccaaatca taaaaaatgg 1860 1920 aaagtcaaat attacaaagg tttgggcacc agcacatcaa aggaagctaa agaatacttt 1980 gcagatatga aaagacatcg tatccagttc aaatattctg gtcctgaaga tgatgctgct 2040 atcagcctgg cctttagcaa aaaacagata gatgatcgaa aggaatggtt aactaatttc atggaggata gaagacaacg aaagttactt gggcttcctg aggattactt gtatggacaa 2100 2160 actaccacat atctgacata taatgacttc atcaacaagg aacttatctt gttctcaaat 2220 tctgataacg agagatctat cccttctatg gtggatggtt tgaaaccagg tcagagaaag gttttgttta cttgcttcaa acggaatgac aagcgagaag taaaggttgc ccaattagct 2280 2340 ggatcagtgg ctgaaatgtc ttcttatcat catggtgaga tgtcactaat gatgaccatt atcaatttgg ctcagaattt tgtgggtagc aataatctaa acctcttgca gcccattggt 2400 cagtttggta ccaggctaca tggtggcaag gattctgcta gtccacgata catctttaca 2460 atgeteaget etttggeteg attgttattt eeaceaaaag atgateacae gttgaagttt 2520 ttatatgatg acaaccagcg tgttgagcct gaatggtaca ttcctattat tcccatggtg 2580 ctgataaatg gtgctgaagg aatcggtact gggtggtcct gcaaaatccc caactttgat 2640 gtgcgtgaaa ttgtaaataa catcaggcgt ttgatggatg gagaagaacc tttgccaatg 2700 2760 cttccaagtt acaagaactt caagggtact attgaagaac tggctccaaa tcaatatgtg 2820 attagtggtg aagtagetat tettaattet acaaceattg aaateteaga getteeegte 2880 agaacatgga cccagacata caaagaacaa gttctagaac ccatgttgaa tggcaccgag 2940 aagacacctc ctctcataac agactatagg gaataccata cagataccac tgtgaaattt gttgtgaaga tgactgaaga aaaactggca gaggcagaga gagttggact acacaaagtc 3000 3060 ttcaaactcc aaactagtct cacatgcaac tctatggtgc tttttgacca cgtaggctgt 3120 ttaaagaaat atgacacggt gttggatatt ctaagagact tttttgaact cagacttaaa 3180 tattatggat taagaaaaga atggctccta ggaatgcttg gtgctgaatc tgctaaactg aataatcagg ctcgctttat cttagagaaa atagatggca aaataatcat tgaaaataag 3240 cctaagaaag aattaattaa agttctgatt cagaggggat atgattcgga tcctgtgaag 3300 3360 gcctggaaag aagcccagca aaaggttcca gatgaagaag aaaatgaaga gagtgacaac gaaaaggaaa ctgaaaagag tgactccgta acagattctg gaccaacctt caactatctt 3420 3480 cttgatatgc ccctttggta tttaaccaag gaaaagaaag atgaactctg caggctaaga aatgaaaaag aacaagagct ggacacatta aaaagaaaga gtccatcaga tttgtggaaa 3540 3600 gaagacttgg ctacatttat tgaagaattg gaggctgttg aagccaagga aaaacaagat 3660 gaacaagtcg gacttcctgg gaaagggggg aaggccaagg ggaaaaaaac acaaatggct gaagttttgc cttctccgcg tggtcaaaga gtcattccac gaataaccat agaaatgaaa 3720 3780 gcagaggcag aaaagaaaaa taaaaagaaa attaagaatg aaaatactga aggaagccct 3840 caagaagatg gtgtggaact agaaggccta aaacaaagat tagaaaagaa acagaaaaga gaaccaggta caaagacaaa gaaacaaact acattggcat ttaagccaat caaaaaagga 3900 3960 aagaagagaa atccctggcc tgattcagaa tcagatagga gcagtgacga aagtaatttt gatgtccctc cacgagaaac agagccacgg agagcagcaa caaaaacaaa attcacaatg 4020 gatttggatt cagatgaaga tttctcagat tttgatgaaa aaactgatga tgaagatttt 4080

```
gtcccatcag atgctagtcc acctaagacc aaaacttccc caaaacttag taacaaagaa
                                                                     4140
ctgaaaccac agaaaagtgt cgtgtcagac cttgaagctg atgatgttaa gggcagtgta
                                                                     4200
                                                                     4260
ccactgtett caageeetee tgetacacat tteecagatg aaactgaaat tacaaaceea
gttcctaaaa agaatgtgac agtgaagaag acagcagcaa aaagtcagtc ttccacctcc
                                                                     4320
                                                                     4380
actaccggtg ccaaaaaaag ggctgcccca aaaggaacta aaagggatcc agctttgaat
tctggtgtct ctcaaaagcc tgatcctgcc aaaaccaaga atcgccgcaa aaggaagcca
                                                                     4440
                                                                     4500
tccacttctg atgattctga ctctaatttt gagaaaattg tttcgaaagc agtcacaagc
aagaaateca agggggagag tgatgaette catatggaet ttgaeteage tgtggeteet
                                                                     4560
cgggcaaaat ctgtacgggc aaagaaacct ataaagtacc tggaagagtc agatgaagat
                                                                     4620
gatctgtttt aaaatgtgag gcgattattt taagtaatta tcttaccaag cccaagactg
                                                                     4680
gttttaaagt tacctgaagc tcttaacttc ctcccctctg aatttagttt ggggaaggtg
                                                                     4740
tttttagtac aagacatcaa agtgaagtaa agcccaagtg ttctttagct tt
                                                                     4792
       133
1685
DNA
Homo sapiens
<400> 133
gagtagetge ttteggteeg ceggacacae eggacagata gaegtgegga eggeceacea
                                                                       60
ccccageceg ccaactagte agectgegee tggegeetee ceteteeagg tecateegee
                                                                      120
atgtggcccc tgtggcgcct cgtgtctctg ctggccctga gccaggccct gccctttgag
                                                                      180
                                                                      240
cagagagget tetgggaett caccetggae gatgggeeat teatgatgaa egatgaggaa
gettegggeg etgaeacete aggegteetg gaeeeggaet etgteacace cacetacage
                                                                      300
                                                                      360
gccatgtgtc ctttcggctg ccactgccac ctgcgggtgg ttcagtgctc cgacctgggt
ctgaagtctg tgcccaaaga gatctcccct gacaccacgc tgctggacct gcagaacaac
                                                                       420
gacateteeg ageteegeaa ggatgaette aagggtetee ageaeeteta egeeetegte
                                                                       480
                                                                       540
ctggtgaaca acaagatete caagatecat gagaaggeet teageeeact geggaagetg
                                                                       600
cagaagetet acatetecaa gaaccacetg gtggagatee egeecaacet acceagetee
ctggtggagc tccgcatcca cgacaaccgc atccgcaagg tgcccaaggg agtgttcagc
                                                                       660
                                                                      720
gggctccgga acatgaactg catcgagatg ggcgggaacc cactggagaa cagtggcttt
                                                                      780
gaacctggag ccttcgatgg cctgaagctc aactacctgc gcatctcaga ggccaagctg
actggcatcc ccaaagacct ccctgagacc ctgaatgaac tccacctaga ccacaacaaa
                                                                       840
                                                                      900
atccaggcca tcgaactgga ggacctgctt cgctactcca agctgtacag gctgggccta
                                                                      960
ggccacaacc agatcaggat gatcgagaac gggagcctga gcttcctgcc caccctccgg
                                                                      1020
gagetecaet tggacaacaa caagttggee agggtgeeet cagggetece agaceteaag
ctcctccagg tggtctatct gcactccaac aacatcacca aagtgggtgt caacgacttc
                                                                      1080
tgtcccatgg gcttcggggt gaagcgggcc tactacaacg gcatcagcct cttcaacaac
                                                                      1140
                                                                     1200
cccgtgccct actgggaggt gcagccggcc actttccgct gcgtcactga ccgcctggcc
atccagtttg gcaactacaa aaagtagagg cagctgcagc caccgcgggg cctcagtggg
                                                                      1260
                                                                     1320
ggtctctggg gaacacagcc agacatcctg atggggaggc agagccagga agctaagcca
gggcccagct gcgtccaacc cagcccccca cctcaggtcc ctgaccccag ctcgatgccc
                                                                     1380
catcaccgcc tctccctggc tcccaagggt gcaggtgggc gcaaggcccg gcccccatca
                                                                     1440
catgttccct tggcctcaga gctgcccctg ctctcccacc acagccaccc agaggcaccc
                                                                      1500
                                                                      1560
catgaagett ttttetegtt caeteecaaa eecaagtgte caaageteea gteetaggag
                                                                      1620
aacagtccct gggtcagcag ccaggaggcg gtccataaga atggggacag tgggctctgc
cagggetgee geacetgtee agaacaacat gttetgttee teeteeteat geattteeag
                                                                      1680
ccttg
                                                                      1685
```

<sup>&</sup>lt;210> 134 <211> 2334 <212> DNA <213> Homo sapiens

```
<400> 134 agacacetet geceteacea tgageetetg geageecetg gteetggtge teetggtget
                                                                       60
gggctgctgc tttgctgccc ccagacagcg ccagtccacc cttgtgctct tccctggaga
                                                                       120
cctgagaacc aatctcaccg acaggcagct ggcagaggaa tacctgtacc gctatggtta
                                                                       180
cactegggtg geagagatge gtggagagte gaaatetetg gggeetgege tgetgettet
                                                                       240
                                                                       300
ccagaagcaa ctgtccctgc ccgagaccgg tgagctggat agcgccacgc tgaaggccat
qcqaacccca cqqtqcgqgg tcccagacct gggcagattc caaacctttg agggcgacct
                                                                       360
caagtggcac caccacaaca tcacctattg gatccaaaac tactcggaag acttgccgcg
                                                                       420
ggeggtgatt gacgacgcct ttgccegegc cttcgcactg tggagegegg tgacgccgct
                                                                       480
caccttcact cgcgtgtaca gccgggacgc agacatcgtc atccagtttg gtgtcgcgga
                                                                       540
                                                                       600
gcacggagac gggtatecet tegaegggaa ggaegggete etggeacaeg cetttectee
                                                                       660
tggccccggc attcagggag acgcccattt cgacgatgac gagttgtggt ccctgggcaa
                                                                       720
gggcgtcgtg gttccaactc ggtttggaaa cgcagatggc gcggcctgcc acttcccctt
                                                                       780
catcttcgag ggccgctcct actctgcctg caccaccgac ggtcgctccg acggcttgcc
ctggtgcagt accacggcca actacgacac cgacgaccgg tttggcttct gccccagcga
                                                                       840
gagactetae accegggaeg geaatgetga tgggaaacee tgeeagttte catteatett
                                                                       900
                                                                       960
ccaaggccaa tectacteeg cetgeaceae ggaeggtege teegaegget acegetggtg
                                                                     1020
cgccaccacc gccaactacg accgggacaa gctcttcggc ttctgcccga cccgagctga
                                                                      1080
ctcgacggtg atggggggca actcggcggg ggagctgtgc gtcttcccct tcactttcct
gggtaaggag tactcgacct gtaccagcga gggccgcgga gatgggcgcc tctggtgcgc
                                                                     1140
                                                                     1200
taccacctcg aactttgaca gcgacaagaa gtggggcttc tgcccggacc aaggatacag
tttgtteete gtggeggege atgagttegg ceaegegetg ggettagate atteeteagt
                                                                     1260
gccggaggcg ctcatgtacc ctatgtaccg cttcactgag gggcccccct tgcataagga
                                                                      1320
                                                                      1380
cgacgtgaat ggcatccggc acctctatgg tectcgcect gaacctgage cacggcetec
aaccaccacc acaccgcagc ccacggctcc cccgacggtc tgccccaccg gaccccccac
                                                                      1440
                                                                      1500
tgtccacccc tcagagcgcc ccacagctgg ccccacaggt cccccctcag ctggcccac
                                                                      1560
aggtcccccc actgctggcc cttctacggc cactactgtg cctttgagtc cggtggacga
                                                                     1620
tgcctgcaac gtgaacatct tcgacgccat cgcggagatt gggaaccagc tgtatttgtt
                                                                     1680
caaggatggg aagtactggc gattetetga gggcaggggg ageeggeege agggeecett
cettategee gacaagtgge cegegetgee eegeaagetg gacteggtet ttgaggagee
                                                                     1740
                                                                     1800
getetecaag aagettttet tettetetgg gegeeaggtg tgggtgtaca eaggegegte
                                                                     1860
ggtgetggge cegaggegte tggacaaget gggeetggga geegaegtgg cecaggtgae
eggggeeete eggagtggea gggggaagat getgetgtte agegggegge geetetggag
                                                                     1920
                                                                     1980
gttcgacgtg aaggcgcaga tggtggatcc ccggagcgcc agcgaggtgg accggatgtt
                                                                      2040
ccccggggtg cctttggaca cgcacgacgt cttccagtac cgagagaaag cctatttctg
                                                                      2100
ccaggaccgc ttctactggc gcgtgagttc ccggagtgag ttgaaccagg tggaccaagt
gggctacgtg acctatgaca tcctgcagtg ccctgaggac tagggctccc gtcctgcttt
                                                                      2160
gcagtgccat gtaaatcccc actgggacca accctgggga aggagccagt ttgccggata
                                                                     2220
caaactggta ttctgttctg gaggaaaggg aggagtggag gtgggctggg ccctctcttc
                                                                      2280
tcacctttgt tttttgttgg agtgtttcta ataaacttgg attctctaac cttt
                                                                      2334
       135
692
DNA
Homo sapiens
<400> 135 ttccccgagc cgcagtcttg gaccataatc atggtggaca tgatggactt gcccaggtcg
                                                                        60
cgcatcaacg ccggcatgct agctcaattc atcgacaagc ctgtctgctt cgtagggagg
                                                                       120
                                                                       180
ctggaaaaga ttcatcccac cggaaaaatg tttattcttt cagatggaga aggaaaaaat
ggaaccatcg agttgatgga accccttgat gaagaaatct ctggaattgt ggaagtggtt
                                                                       240
                                                                       300
ggaagagtaa ccgccaaggc caccatcttg tgtacatctt atgtccagtt taaagaagat
```

```
agccatcctt ttgatcttgg actttacaat gaagctgtga aaattatcca tgacttccct
                                                                      360
cagttttatc ctttagggat tgtgcaacat gattgatctt gatggatttt catacgattg
                                                                      420
taaatgaget atattaaagt etattaaagg aageeettet tgtttgaggg agagatttet
                                                                      480
gtgctttctc atatttaatt tgctgttttt aagatattcc aacctagagt ttttgatgga
                                                                      540
                                                                      600
actgatatat tgacagttct caccgaagcc cttttataaa gaattgctac tccaatatat
gqtcagatta gatqcaagaa taaagcagtt gtccgagtct aagtttctat tttattaata
                                                                      660
aaaactaaaa tggtacgtac aaaaaaaaaa cc
                                                                      692
       136
2002
DNA
Homo sapiens
<400> 136
ctcttctcac atcagcgggt ccaggcccaa ccgacagact atgggggctc cttcaccagg
                                                                        60
egetgegtgg agtggetget gggeetetae tteeteagee acateeeeat caccetgtte
                                                                      120
atggacctgc aggcggtcgt gccgcgcgag ctctacccag tcgagtttag aaacctgctg
                                                                      180
aagtggtatg ctaaggagtt caaagaccca ctgctacagg agcccccagc ctggtttaag
                                                                      240
teetttetgt tttgegaget tgtgttteag etgeetttet tteecattge aaegtatgee
                                                                      300
ttcctcaaag gaagctgcaa gtggattcga actcctgcaa tcatctactc tgttcacacc
                                                                      360
atgacaacct taattetgat actetecaca tttetgtttg aggatttete caaagceagt
                                                                      420
ggtttcaagg gacaaagacc tgagactttg catgaacggt taacccttgt gtctgtctat
                                                                       480
gececetaet taeteateee atteataett ttaattttea tgttgeggag eecetaetae
                                                                      540
aagtatgaag agaaaagaaa aaaaaaatga aggaaacaac cactggccca gggtagagat
                                                                      600
gcctacaggg tggttgcttg ttggatacat acaggaacac tgctcagaac ccacgtcttc
                                                                      660
agcagcattt gaaacactgg cagcaatgca caagagcaag atggtgtcag gaaccatgtc
                                                                      720
aaaccctcac cttcttccat tttttttttt tttttgagac agtctcactc tgttgccagg
                                                                      780
ctggagtaaa gggcagtggc atgatctcgg ctcactgcaa cctccgcctc ctgggctcaa
                                                                      840
                                                                      900
gccatcttcc ttagcctccc aagtagctag aactacaggt gtgtaccaac acgtatggct
aatttgtttt gttttttttg tgtgtgtgga gacagggttt tgccatgttg cccaggttgg
                                                                      960
tctcgaacgc ctaggctcaa gtgatctgcc cacctcagtc tccctaagtg ctgggattac
                                                                     1020
agacgtgaac cactgggccc agcccaaacc ttcaccttct aagggcactg ggatgaacag
                                                                     1080
accgatcggc ttgagggtgg gcaaaggggt gtgggctagg ttataaggaa gtggtaccaa
                                                                     1140
ataactgtgt tgcctgagtt ccaccgcaag attactaaaa gcaggaccag accagaaact
                                                                     1200
gctaaagaac atggcctgtt tgacatgttc atgagtcacc tgacccacag catatatgct
                                                                     1260
                                                                     1320
tatgactaaa ccctccactc ctgattctca agagtgtatc acctgtcagc aaaatgaata
                                                                     1380
gtgggatatt ttgggccatt ttaaatgtga aattttgcct ctttaatgtt aattcaaaac
tatatcaatg ttttcttgtt cccacctcta acccaaggaa aaaagagaaa acatactatg
                                                                     1440
caaaggaagt ttaaacttaa gttttcctta agggtcagcc caacaatgac tttcagtcaa
                                                                     1500
atggattaaa ctggaaaatg tttttgtttc tgttgtaaac agatcatcct aggcgaaagt
                                                                     1560
tttttttgtt tgtttgcttt taaattagtt tatttctaaa tcttagtctt ccacatttct
                                                                     1620
                                                                     1680
agaggccacc tgacacaagt ccctgtatct gaagtctagc atctcaaggc tgatctggaa
                                                                     1740
gtgtgctagt atgctcccta gtggataact taatctttta atacagttcc gtcattccca
                                                                     1800
tettgtttte agaagagaag gtggetacag ceaggeataa ettateeact gtgtgeatag
agggtctctt cacgttgatg cttggcattc catcagcttt ctctaagtct ttgctcaagt
                                                                     1860
                                                                     1920
tcaaggttaa aatgatgtta gacaacaggt cccagtcagt cccctctatt ttcacccatt
ttgctcacaa gccatattgg cccgattagt ggtactgtct gactcacgtg tgtgatccaa
                                                                     1980
ataaaggtag ctgccgggaa tt
                                                                     2002
```

<sup>&</sup>lt;210> 137 <211> 3220 <212> DNA <213> Homo sapiens

<400> 137	cggtgccgcc	gacccgggcc	ataccatata	cccqtqqctc	cagccgctgc	60
	tectegtete					120
	cgccatggaa					180
	gatgcccata					240
cgtagtttac	agtatttaat	tttatataat	atatattatt	tattatagca	tttttgatac	300
ctcatattct	gtttacacat	cttgaaaggc	gctcagtagt	tctcttacta	aacaaccact	360
actccagaga	atggcaacgc	tgattaccag	tactacagct	gctaccgccg	cttctggtcc	420
tttggtggac	tacctatgga	tgctcatcct	gggcttcatt	attgcatttg	tcttggcatt	480
ctccgtggga	gccaatgatg	tagcaaattc	ttttggtaca	gctgtgggct	caggtgtagt	540
gaccctgaag	caagcctgca	tcctagctag	catctttgaa	acagtgggct	ctgtcttact	600
gggggccaaa	gtgagcgaaa	ccatccggaa	gggcttgatt	gacgtggaga	tgtacaactc	660
gactcaaggg	ctactgatgg	ccggctcagt	cagtgctatg	tttggttctg	ctgtgtggca	720
actcgtggct	tcgtttttga	agctccctat	ttctggaacc	cattgtattg	ttggtgcaac	780
tattggtttc	tccctcgtgg	caaaggggca	ggagggtgtc	aagtggtctg	aactgataaa	840
aattgtgatg	tcttggttcg	tgtccccact	gctttctgga	attatgtctg	gaattttatt	900
	cgtgcattca					960
	ttctatgcct					1020
	ctgggctttg					1080
	ttctgtgccc					1140
	gaaataaagt					1200
- "	gaccatgaag					1260
	gtagggcctg					1320
	cttggagatt					1380
	gaaaccagca					1440 1500
	cagttcagtc					1560
	gtgcataagg ggagattgca					1620
	tataccatgg					1680
	aagggcgaag					1740
	atggacagtt					1800
	gacatgagtg					1860
	gaagaatggt					1920
	cttacagcct					1980
	cctctggttg					2040
	ccaatatggc					2100
ggtttgggga	agaagagtta	tccagaccat	ggggaaggat	ctgacaccga	tcacaccctc	2160
tagtggcttc	agtattgaac	tggcatctgc	cctcactgtg	gtgattgcat	caaatattgg	2220
ccttcccatc	agtacaacac	attgtaaagt	gggctctgtt	gtgtctgttg	gctggctccg	2280
gtccaagaag	gctgttgact	ggcgtctctt	tcgtaacatt	tttatggcct	ggtttgtcac	2340
agtccccatt	tctggagtta	tcagtgctgc	catcatggca	atcttcagat	atgtcatcct	2400
cagaatgtga	agctgtttga	gattaaaatt	tgtgtcaatg	tttgggacca	tcttaggtat	2460
	ctgaagaatg					2520
	ggagggaagt					2580
	tagctgtgta					2640
	ctgtgaattc	_				2700
	taatgttgtc					2760
catgaagagc	cgtttgacag	agcatgctct	gcgttgttgg	tttcaccagc	ttctgccctc	2820

```
acatgcacag ggatttaaca acaaaaatat aactacaact tcccttgtag tctcttatat
                                                                      2880
aagtagagtc cttggtactc tgccctcctg tcagtagtgg caggatctat tggcatattc
                                                                      2940
gggagcttct tagagggatg aggttctttg aacacagtga aaatttaaat tagtaacttt
                                                                      3000
tttgcaagca gtttattgac tgttattgct aagaagaagt aagaaagaaa aagcctgttg
                                                                      3060
gcaatcttgg ttatttcttt aagatttctg gcagtgtggg atggatgaat gaagtggaat
                                                                      3120
qtqaactttq ggcaagttaa atgggacagc cttccatgtt catttgtcta cctcttaact
                                                                      3180
                                                                      3220
gaataaaaaa gcctacagtt tttagaaaaa acccgaattc
       DNA
Homo sapiens
<400> 138 atggcgagca gcggagtcaa gaacaccac cgatggcgga gaaaagcccc tcatgggagg
                                                                        60
                                                                       120
gaaaggaaag agaaaggaaa gaaaagaaaa agatgtatct ggtcaactcc aaaaaggaga
cataagaaaa aaagcctccc aagagagatc attgatggca cttcagaaat gaatgaagga
                                                                       180
                                                                       240
aagaggtccc agaagatgcc tagtacacca cgaagggtca cacaaggggc agcctcacct
                                                                       300
gggcatggca tccaagagaa gctccaagtg gtggataagg tgactcaaag gaaagacgac
                                                                       360
tcaacctgga actcagaggt catgatgagg gtccaaaagg caagaactaa atgtgcccga
                                                                       420
aagtccagat cgaaagaaaa gaaaaaggag aaagatatct gttcaagctc aaaaaggaga
tttcagaaaa atattcaccg aagaggaaaa cccaaaagtg acactgtgga ttttcactgt
                                                                       480
tctaagtccc ccgtgacctg tggtgaggcg aaagggattt tatataagaa gaaaatgaaa
                                                                       540
                                                                       600
cacggatcct cagtgaagtg cattcggaat gaggatggaa cttggttaac accaaatgaa
tttgaagtcg aaggaaaagg aaggaacgca aagaactgga aacggaatat acgttgtgaa
                                                                       660
ggaatgaccc taggagagct gctgaagagt ggacttttgc tctgtcctcc aagaataaat
                                                                       720
ctcaagagag agttaaatag caagtgaatt tctactaccc tctcagtcac catgttgcag
                                                                       780
actttccctg tctggaggct caccttagag cttctgagtt tccaagcccg gaatt
                                                                       835
       139
840
DNA
Homo sapiens
<400> 139
ccggtgagtc gccggcgctg cagagggagg cggcactggt ctcgacgtgg ggcggccagc
                                                                        60
gatgaagccg cccagttcaa tacaaacaag tgagtttgac tcatcagatg aagagcctat
                                                                       120
                                                                       180
tgaagatgaa cagactccaa ttcatatatc atggctatct ttgtcacgag tgaattgttc
                                                                       240
tragtttete ggtttatgtg etetteragg ttgtaaattt aaagatgtta gaagaaatgt
                                                                       300
ccaaaaagat acagaagaac taaagagctg tggtatacaa gacatatttg ttttctgcac
cagaggggaa ctgtcaaaat atagagtccc aaaccttctg gatctctacc agcaatgtgg
                                                                       360
aattatcacc catcatcatc caatcgcaga tggagggact cctgacatag ccagctgctg
                                                                       420
tgaaataatg gaagagetta caacetgeet taaaaattae egaaaaacet taatacaetg
                                                                       480
                                                                       540
ctatggagga cttgggagat cttgtcttgt agctgcttgt ctcctactat acctgtctga
                                                                       600
cacaatatca ccagagcaag ccatagacag cctgcgagac ctaagaggat ccggggcaat
acagaccatc aagcaataca attatcttca tgagtttcgg gacaaattag ctgcacatct
                                                                       660
                                                                       720
atcatcaaga gattcacaat caagatctgt atcaagataa aggaattcaa atagcatata
tatgaccatg tctgaaatgt cagttctcta gcataatttg tattgaaaat gaaaccacca
                                                                       780
gtcgttatca acttgaatgt aaatgtacat gtgcagatat tcctaaagtg ccttcgtggc
                                                                       840
       140
2439
DNA
Homo sapiens
                                                                        60
cageacceage cteccegeca ecgecatggt eccegacace geetgegtte ttetgeteac
cctggctgcc ctcggcgcgt ccggacaggg ccagagcccg ttgggctcag acctgggccc
                                                                       120
```

```
gcagatgett egggaactge aggaaaccaa egeggegetg caggaegtge gggaetgget
                                                                      180
                                                                      240
gcggcagcag gtcagggaga tcacgttcct gaaaaacacg gtgatggagt gtgacgcgtg
                                                                      300
egggatgeag cagteagtae geaceggeet acceagegtg eggeeeetge tecaetgege
                                                                      360
gcccggcttc tgcttccccg gcgtggcctg catccagacg gagagcggcg gccgctgcgg
                                                                       420
cccctgcccc gcgggcttca cgggcaacgg ctcgcactgc accgacgtca acgagtgcaa
egeceaecce tgetteecce gagteegetg tateaacace ageceggggt teegetgega
                                                                       480
                                                                       540
ggcttgcccg ccggggtaca gcggccccac ccaccagggc gtggggctgg ctttcgccaa
                                                                       600
ggccaacaag caggtttgca cggacatcaa cgagtgtgag accgggcaac ataactgcgt
ccccaactcc gtgtgcatca acaccegggg ctccttccag tgcggcccgt gccagcccgg
                                                                       660
                                                                       720
cttcgtgggc gaccaggcgt ccggctgcca gcgcggcgca cagcgcttct gccccgacgg
                                                                       780
ctcgcccagc gagtgccacg agcatgcaga ctgcgtccta gagcgcgatg gctcgcggtc
                                                                       840
gtgcgtgtgt cgcgttggct gggccggcaa cgggatcctc tgtggtcgcg acactgacct
                                                                       900
agacggette ceggaegaga agetgegetg eeeggageeg eagtgeegta aggaeaactg
cgtgactgtg cccaactcag ggcaggagga tgtggaccgc gatggcatcg gagacgcctg
                                                                       960
                                                                      1020
cgatccggat gccgacgggg acggggtccc caatgaaaag gacaactgcc cgctggtgcg
                                                                      1080
gaacccagac cagegcaaca eggaegagga caagtgggge gatgegtgeg acaactgeeg
gtcccagaag aacgacgacc aaaaggacac agaccaggac ggccggggcg atgcgtgcga
                                                                      1140
                                                                      1200
cgacgacatc gacggegacc ggatccgcaa ccaggcegac aactgcccta gggtacccaa
                                                                      1260
ctcagaccag aaggacagtg atggcgatgg tataggggat gcctgtgaca actgtcccca
                                                                      1320
gaagagcaac ccggatcagg cggatgtgga ccacgacttt gtgggagatg cttgtgacag
cgatcaagac caggatggag acggacatca ggactctcgg gacaactgtc ccacggtgcc
                                                                      1380
taacagtgcc caggaggact cagaccacga tggccagggt gatgcctgcg acgacgacga
                                                                      1440
                                                                      1500
cgacaatgac ggagtccctg acagtcggga caactgccgc ctggtgccta accccggcca
ggaggacgcg gacagggacg gcgtgggcga cgtgtgccag gacgactttg atgcagacaa
                                                                      1560
                                                                      1620
ggtggtagac aagatcgacg tgtgtccgga gaacgctgaa gtcacgctca ccgacttcag
ggccttccag acagtcgtgc tggacccgga gggtgacgcg cagattgacc ccaactgggt
                                                                      1680
                                                                      1740
ggtgctcaac cagggaaggg agatcgtgca gacaatgaac agcgacccag gcctggctgt
gggttacact gccttcaatg gcgtggactt cgagggcacg ttccatgtga acacggtcac
                                                                      1800
                                                                      1860
ggatgacgac tatgeggget teatetttgg etaccaggac agetecaget tetacgtggt
                                                                      1920
catgtggaag cagatggagc aaacgtattg gcaggcgaac cccttccgtg ctgtggccga
gcctggcatc caactcaagg ctgtgaagtc ttccacaggc cccggggaac agctgcggaa
                                                                      1980
cgctctgtgg catacaggag acacagagtc ccaggtgcgg ctgctgtgga aggacccgcg
                                                                      2040
                                                                      2100
aaacgtgggt tggaaggaca agaagteeta tegttggtte etgeageace ggeeceaagt
gggctacatc agggtgcgat tctatgaggg ccctgagctg gtggccgaca gcaacgtggt
                                                                      2160
                                                                      2220
cttggacaca accatgcggg gtggccgcct gggggtcttc tgcttctccc aggagaacat
                                                                      2280
catctgggcc aacctgcgtt accgctgcaa tgacaccatc ccagaggact atgagaccca
                                                                      2340
tcagctgcgg caagcctagg gaccagggtg aggacccgcc ggatgacagc caccctcacc
                                                                      2400
gcggctggat gggggctctg cacccagccc aaggggtggc cgtcctgagg gggaagtgag
                                                                      2439
aagggctcag agaggacaaa ataaagtgtg tgtgcaggg
       141
2261
DNA
Homo sapiens
<400> 141 ccgcggttcc ggctgctccg gcgaggcgac ccttgggtcg gcgctgcggg cgaggtgggc
                                                                        60
aggtaggtgg geggaeggee geggttetee ggeaagegea ggeggeggag teecceaegg
                                                                       120
                                                                       180
egecegaage geceeegea eeeeeggeet eeagegttga ggegggggag tgaggagatg
ccgacccaga gggacagcag caccatgtcc cacacggtcg caggcggcgg cagcggggac
                                                                       240
```

cattcccacc aggtccgggt gaaagcctac taccgcgggg atatcatgat aacacatttt

300

```
360
gaaccttcca tctcctttga gggcctttgc aatgaggttc gagacatgtg ttcttttgac
aacgaacagc tcttcaccat gaaatggata gatgaggaag gagacccgtg tacagtatca
                                                                      420
tctcagttgg agttagaaga agcctttaga ctttatgagc taaacaagga ttctgaactc
                                                                      480
ttgattcatg tgttcccttg tgtaccagaa cgtcctggga tgccttgtcc aggagaagat
                                                                      540
                                                                      600
aaatccatct accgtagagg tgcacgccgc tggagaaagc tttattgtgc caatggccac
                                                                      660
actttccaag ccaagcgttt caacaggcgt gctcactgtg ccatctgcac agaccgaata
tggggacttg gacgccaagg atataagtgc atcaactgca aactcttggt tcataagaag
                                                                      720
                                                                      780
tgccataaac tcgtcacaat tgaatgtggg cggcattctt tgccacagga accagtgatg
                                                                      840
cccatggate agteatecat geattetgae catgeacaga cagtaattee atataateet
                                                                      900
tcaagtcatg agagtttgga tcaagttggt gaagaaaaag aggcaatgaa caccagggaa
agtggcaaag cttcatccag tctaggtctt caggattttg atttgctccg ggtaatagga
                                                                      960
                                                                     1020
agaggaagtt atgccaaagt actgttggtt cgattaaaaa aaacagatcg tatttatgca
                                                                     1080
atgaaagttg tgaaaaaaga gcttgttaat gatgatgagg atattgattg ggtacagaca
gagaagcatg tgtttgagca ggcatccaat catcctttcc ttgttgggct gcattcttgc
                                                                     1140
tttcagacag aaagcagatt gttctttgtt atagagtatg taaatggagg agacctaatg
                                                                     1200
tttcatatgc agcgacaaag aaaacttcct gaagaacatg ccagatttta ctctgcagaa
                                                                     1260
                                                                     1320
atcagtctag cattaaatta tcttcatgag cgagggataa tttatagaga tttgaaactg
gacaatgtat tactggactc tgaaggccac attaaactca ctgactacgg catgtgtaag
                                                                     1380
                                                                     1440
gaaggattac ggccaggaga tacaaccagc actttctgtg gtactcctaa ttacattgct
                                                                     1500
cctgaaattt taagaggaga agattatggt ttcagtgttg actggtgggc tcttggagtg
ctcatgtttg agatgatggc aggaaggtct ccatttgata ttgttgggag ctccgataac
                                                                     1560
                                                                     1620
cctgaccaga acacagagga ttatctcttc caagttattt tggaaaaaca aattcgcata
                                                                     1680
ccacgttctc tgtctgtaaa agctgcaagt gttctgaaga gttttcttaa taaggaccct
                                                                     1740
aaggaacgat tgggttgtca tcctcaaaca ggatttgctg atattcaggg acacccgttc
                                                                     1800
ttccgaaatg ttgattggga tatgatggag caaaaacagg tggtacctcc ctttaaacca
                                                                     1860
aatatttctg gggaatttgg tttggacaac tttgattctc agtttactaa tgaacctgtc
cagctcactc cagatgacga tgacattgtg aggaagattg atcagtctga atttgaaggt
                                                                     1920
tttgagtata tcaatcctct tttgatgtct gcagaagaat gtgtctgatc ctcatttttc
                                                                     1980
                                                                     2040
aaccatgtat tctactcatg ttgccattta atgcatggat aaacttgctg caagcctgga
                                                                     2100
tacaattaac cattttatat ttgccaccta caaaaaaaca cccaatatct tctcttgtag
actatatgaa tcaattatta catctgtttt actatgaaaa aaaaattaat actactagct
                                                                     2160
                                                                     2220
tccagacaat catgtcaaaa tttagttgaa ctggtttttc agtttttaaa aggcctacag
                                                                      2261
atgagtaatg aagttacctt ttttgtttaa aaaaaaaaa g
       142
1488
DNA
Homo sapiens
                                                                        60
cgcgacggct gagcaaggac tctccagtcc tcagtcacct tggacaaaga agtgtggatc
                                                                      120
ctcagattcc atcttttcca actccaaggt gccatggcag agaaggtgct ggtaacaggt
                                                                      180
ggggctggct acattggcag ccacaeggtg ctggagctgc tggaggctgg ctacttgcct
gtggtcatcg ataacttcca taatgccttc cgtggagggg gctccctgcc tgagagcctg
                                                                       240
                                                                      300
cggcgggtcc aggagctgac aggccgctct gtggagtttg aggagatgga cattttggac
cagggagece tacagegtet etteaaaaag tacagettta tggeggteat eeactttgeg
                                                                       360
                                                                       420
qqqctcaaqq ccqtgggcga gtcggtgcag aagcctctgg attattacag agttaacctg
                                                                       480
accgggacca tccagcttct ggagatcatg aaggcccacg gggtgaagaa cctggtgttc
                                                                       540
agcageteag ceaetgtgta egggaacece eagtacetge ceettgatga ggeceaecee
acgggtggtt gtaccaaccc ttacggcaag tccaagttct tcatcgagga aatgatccgg
                                                                       600
gacctgtgcc aggcagacaa gacttggaac gtagtgctgc tgcgctattt caaccccaca
                                                                       660
```

```
720
ggtgcccatg cctctggctg cattggtgag gatccccagg gcatacccaa caacctcatg
ccttatgtct cccaggtggc gatcgggcga cgggaggccc tgaatgtctt tggcaatgac
                                                                      780
                                                                      840
tatgacacag aggatggcac aggtgtccgg gattacatcc atgtcgtgga tctggccaag
                                                                      900
ggccacattg cagccttaag gaagctgaaa gaacagtgtg gctgccggat ctacaacctg
ggcacgggca caggctattc agtgctgcag atggtccagg ctatggagaa ggcctctggg
                                                                      960
                                                                     1020
aagaagatcc cgtacaaggt ggtggcacgg cgggaaggtg atgtggcagc ctgttacgcc
aaccccagcc tggcccaaga ggagctgggg tggacagcag ccttagggct ggacaggatg
                                                                     1080
tgtgaggatc tctggcgctg gcagaagcag aatccttcag gctttggcac gcaagcctga
                                                                     1140
                                                                     1200
ggaccetece etaccaagga ecaggaaaag cageagetge etgeteteea geetetggag
gaactcaggg ccctggagct gctggggcca agccaagggc ctcccctacc tcaaacccca
                                                                     1260
                                                                     1320
gctgggcccg cttagcccac caggcatgag gccaaggctc cactgaccag gaggccgagg
tctctaactc ttatcttcca cagggtccaa gagttcatca ggacccccaa gagtgagtga
                                                                      1380
gggggcaagg ctctggcaca aaacctcctc ctcccaggca ctcatttata ttgctctgaa
                                                                      1440
                                                                      1488
agagctttcc aaagtattta aaaataaaaa caagttttct tacactgg
       143
4839
DNA
       Homo sapiens
<\!400> 143 tccggttttt ctcaggggac gttgaaatta tttttgtaac gggagtcggg agaggacggg
                                                                        60
gegtgeeceg egtgegege egtegteete eeeggegete etecacaget egetggetee
                                                                       120
                                                                       180
cgccgcggaa aggcgtcatg ccgcccaaaa ccccccgaaa aacggccgcc accgccgccg
                                                                       240
ctgccgccgc ggaacccccg gcaccgccgc cgccgccccc tcctgaggag gacccagagc
                                                                       300
aggacagcgg cccggaggac ctgcctctcg tcaggcttga gtttgaagaa acagaagaac
                                                                       360
ctgattttac tgcattatgt cagaaattaa agataccaga tcatgtcaga gagagagctt
ggttaacttg ggagaaagtt tcatctgtgg atggagtatt gggaggttat attcaaaaga
                                                                       420
aaaaggaact gtggggaatc tgtatcttta ttgcagcagt tgacctagat gagatgtcgt
                                                                       480
tcacttttac tgagctacag aaaaacatag aaatcagtgt ccataaattc tttaacttac
                                                                       540
                                                                       600
taaaagaaat tgataccagt accaaagttg ataatgctat gtcaagactg ttgaagaagt
                                                                       660
atgatgtatt gtttgcactc ttcagcaaat tggaaaggac atgtgaactt atatatttga
cacaacccag cagttcgata tctactgaaa taaattctgc attggtgcta aaagtttctt
                                                                       720
                                                                       780
ggatcacatt tttattagct aaaggggaag tattacaaat ggaagatgat ctggtgattt
                                                                       840
 catttcagtt aatgctatgt gtccttgact attttattaa actctcacct cccatgttgc
 tcaaagaacc atataaaaca gctgttatac ccattaatgg ttcacctcga acacccaggc
                                                                       900
                                                                       960
gaggtcagaa caggagtgca cggatagcaa aacaactaga aaatgataca agaattattg
                                                                      1020
 aagttctctg taaagaacat gaatgtaata tagatgaggt gaaaaatgtt tatttcaaaa
                                                                      1080
 attttatacc ttttatgaat tctcttggac ttgtaacatc taatggactt ccagaggttg
                                                                      1140
 aaaatctttc taaacgatac gaagaaattt atcttaaaaa taaagatcta gatgcaagat
 tatttttgga tcatgataaa actcttcaga ctgattctat agacagtttt gaaacacaga
                                                                      1200
                                                                      1260
 gaacaccacg aaaaagtaac cttgatgaag aggtgaatgt aattcctcca cacactccag
                                                                      1320
 ttaggactgt tatgaacact atccaacaat taatgatgat tttaaattca gcaagtgatc
                                                                      1380
 aaccttcaga aaatctgatt tcctatttta acaactgcac agtgaatcca aaagaaagta
                                                                      1440
 tactgaaaag agtgaaggat ataggataca tctttaaaga gaaatttgct aaagctgtgg
                                                                      1500
 gacagggttg tgtcgaaatt ggatcacagc gatacaaact tggagttcgc ttgtattacc
                                                                      1560
 gagtaatgga atccatgctt aaatcagaag aagaacgatt atccattcaa aattttagca
 aacttctgaa tgacaacatt tttcatatgt ctttattggc gtgcgctctt gaggttgtaa
                                                                      1620
 tggccacata tagcagaagt acatctcaga atcttgattc tggaacagat ttgtctttcc
                                                                      1680
 catggattct gaatgtgctt aatttaaaag cctttgattt ttacaaagtg atcgaaagtt
                                                                      1740
 ttatcaaagc agaaggcaac ttgacaagag aaatgataaa acatttagaa cgatgtgaac
                                                                      1800
```

```
atcgaatcat ggaatccctt gcatggctct cagattcacc tttatttgat cttattaaac
                                                                    1860
                                                                    1920
aatcaaagga ccgagaagga ccaactgatc accttgaatc tgcttgtcct cttaatcttc
ctctccagaa taatcacact gcagcagata tgtatctttc tcctgtaaga tctccaaaga
                                                                    1980
                                                                    2040
aaaaaggttc aactacgcgt gtaaattcta ctgcaaatgc agagacacaa gcaacctcag
                                                                    2100
ccttccagac ccagaagcca ttgaaatcta cctctcttc actgttttat aaaaaagtgt
ateggetage ctateteegg etaaatacae titigtgaaeg cettetgtet gageaeceag
                                                                    2160
aattagaaca tatcatctgg accettttee ageacaceet geagaatgag tatgaactea
                                                                    2220
tgaqagacag gcatttggac caaattatga tgtgttccat gtatggcata tgcaaagtga
                                                                    2280
agaatataga ccttaaattc aaaatcattg taacagcata caaggatctt cctcatgctg
                                                                     2340
                                                                     2400
ttcaggagac attcaaacgt gttttgatca aagaagagga gtatgattct attatagtat
                                                                     2460
tctataactc ggtcttcatg cagagactga aaacaaatat tttgcagtat gcttccacca
                                                                     2520
ggccccctac cttgtcacca atacctcaca ttcctcgaag cccttacaag tttcctagtt
                                                                     2580
caccettacg gatteetgga gggaacatet atattteace cetgaagagt ecatataaaa
tttcagaagg tctgccaaca ccaacaaaaa tgactccaag atcaagaatc ttagtatcaa
                                                                     2640
                                                                     2700
ttggtgaatc attcgggact tctgagaagt tccagaaaat aaatcagatg gtatgtaaca
                                                                     2760
gcgaccgtgt gctcaaaaga agtgctgaag gaagcaaccc tcctaaacca ctgaaaaaac
tacgctttga tattgaagga tcagatgaag cagatggaag taaacatctc ccaggagagt
                                                                     2820
                                                                     2880
ccaaatttca gcagaaactg gcagaaatga cttctactcg aacacgaatg caaaagcaga
                                                                     2940
aaatgaatga tagcatggat acctcaaaca aggaagagaa atgaggatct caggaccttg
gtggacactg tgtacacctc tggattcatt gtctctcaca gatgtgactg tataactttc
                                                                     3000
                                                                     3060
ccaggttctg tttatggcca catttaatat cttcagctct ttttgtggat ataaaatgtg
cagatgcaat tgtttgggtg attcctaagc cacttgaaat gttagtcatt gttatttata
                                                                     3120
                                                                     3180
caagattgaa aatcttgtgt aaatcctgcc atttaaaaag ttgtagcaga ttgtttcctc
ttccaaagta aaattgctgt gctttatgga tagtaagaat ggccctagag tgggagtcct
                                                                     3240
                                                                     3300
gataacccag gcctgtctga ctactttgcc ttcttttgta gcatataggt gatgtttgct
                                                                     3360
cttgttttta ttaatttata tgtatatttt tttaatttaa catgaacacc cttagaaaat
gtgtcctatc tatcttccaa atgcaatttg attgactgcc cattcaccaa aattatcctg
                                                                     3420
                                                                     3480
aactcttctg caaaaatgga tattattaga aattagaaaa aaattactaa ttttacacat
tagattttat tttactattg gaatctgata tactgtgtgc ttgttttata aaattttgct
                                                                     3540
                                                                    3600
tttaattaaa taaaagctgg aagcaaagta taaccatatg atactatcat actactgaaa
                                                                     3660
cagatttcat acctcagaat gtaaaagaac ttactgatta ttttcttcat ccaacttatg
                                                                     3720
tttttaaatg aggattattg atagtactct tggtttttat accattcaga tcactgaatt
                                                                     3780
tataaagtac ccatctagta cttgaaaaag taaagtgttc tgccagatct taggtataga
                                                                     3840
ggaccctaac acagtatatc ccaagtgcac tttctaatgt ttctgggtcc tgaagaatta
                                                                     3900
agatacaaat taattttact ccataaacag actgttaatt ataggagcct taattttttt
ttcatagaga tttgtctaat tgcatctcaa aattattctg ccctccttaa tttgggaagg
                                                                     3960
                                                                     4020
tttgtgtttt ctctggaatg gtacatgtct tccatgtatc ttttgaactg gcaattgtct
atttatettt tattttttta agteagtatg gtetaacaet ggeatgttea aageeacatt
                                                                     4080
                                                                     4140
atttctagtc caaaattaca agtaatcaag ggtcattatg ggttaggcat taatgtttct
                                                                     4200
atctgatttt gtgcaaaagc ttcaaattaa aacagctgca ttagaaaaag aggcgcttct
cccctccct acacctaaag gtgtatttaa actatcttgt gtgattaact tatttagaga
                                                                     4260
                                                                     4320
tgctgtaact taaaataggg gatatttaag gtagcttcag ctagctttta ggaaaatcac
                                                                     4380
tttgtctaac tcagaattat ttttaaaaag aaatctggtc ttgttagaaa acaaaatttt
                                                                     4440
attittgtgct catttaagtt tcaaacttac tattttgaca gttattttga taacaatgac
actagaaaac ttgactccat ttcatcattg tttctgcatg aatatcatac aaatcagtta
                                                                     4500
gtttttaggt caagggctta ctatttctgg gtcttttgct actaagttca cattagaatt
                                                                     4560
agtgccagaa ttttaggaac ttcagagatc gtgtattgag atttcttaaa taatgcttca
                                                                     4620
```

```
gatattattg ctttattgct tttttgtatt ggttaaaact gtacatttaa aattgctatg
                                                                      4680
ttactatttt ctacaattaa tagtttgtct attttaaaat aaattagttg ttaagagtct
                                                                      4740
taatggtctg atgttgtgtt ctttgtatta agtacactaa tgttctcttt tctgtctagg
                                                                      4800
agaagataga tagaagataa ctctcctagt atctcatcc
                                                                      4839
       144
634
DNA
Homo sapiens
<400> 144 cggctgagag gcagcgaact catctttgcc agtacaggag cttgtgccgt ggcccacagc
                                                                        60
ccacagccca cagccatggg ctgggacctg acggtgaaga tgctggcggg caacgaattc
                                                                       120
                                                                       180
caggtgtccc tgagcagctc catgtcggtg tcagagctga aggcgcagat cacccagaag
                                                                       240
attggcgtgc acgccttcca gcagcgtctg gctgtccacc cgagcggtgt ggcgctgcag
                                                                       300
gacagggtcc cccttgccag ccagggcctg ggccctggca gcacggtcct gctggtggtg
                                                                       360
gacaaatgcg acgaacctct gagcatcctg gtgaggaata acaagggccg cagcagcacc
tacgaggtcc ggctgacgca gaccgtggcc cacctgaagc agcaagtgag cgggctggag
                                                                       420
                                                                       480
ggtgtgcagg acgacctgtt ctggctgacc ttcgagggga agcccctgga ggaccagctc
                                                                       540
ccgctggggg agtacggcct caagcccctg agcaccgtgt tcatgaatct gcgcctgcgg
ggaggeggea cagageetgg egggeggage taagggeete caccageate egageaggat
                                                                       600
                                                                       634
caagggccgg aaataaaggc tgttgtaaga gaat
       145
13500
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 145 aagetteett ettggaatte caaactaata aatgagetaa eteegeecca geecettagt
                                                                        60
ccctccctgc aatccaccta cctctgcaga catcttcttc caaggaacct tgcttgggaa
                                                                       120
acccacacca gacacatcca tcatggcgtc tacagccgca tgggcgtgcg tccctctgtt
                                                                       180
                                                                       240
tatatggcca gagccccgcc tcgctccgcc cctttaaact tggtgggcgg accgaggcgg
ggctcagacc aggccccacc ccgatcagcc acgtccatcg ccctgatttc caggccctcc
                                                                       300
                                                                       360
cagtecetgg gegeacgtee eggatteete ecaegagggg gegggetgeg geeaaatete
                                                                       420
ccgccaggtc agcggccggg cgctgattgg ccccatggcg gcggggccgg ctcgtgattg
                                                                       480
gccagcacgc cgtggtttaa agcggtcggc gcgggaccag gggcttactg cgggacggcc
ttggagagta ctcgggttcg tgaacttccc ggaggcgcaa tgagctgcat taacctgccc
                                                                       540
actgtgctgc ccggctcccc cagcaagacc cgggggcaga tccaggtgcg ggggccagcc
                                                                       600
                                                                       660
ctgogogtgg ctggggatga ggtggtcgtg gtgatagcct gtgtccaggc atccgcgcag
ggcgggccct caaatgacct caccttctct cctaggtgat tctcgggccg atgttctcag
                                                                       720
gaaaaaggta atggcttcgc ggggctgggg tggagctcct tcctcttctc cggggacccc
                                                                       780
ttgtccctcc cctcccctcc cctcccctcc cctccccttc cctccccttc
                                                                       840
                                                                       900
cettecetee cettecette ceetagaagg accageacag cetectacag etceegeeeg
                                                                       960
gggtgctcct cccttgaatt cagtccagga ggaagtctct gccctcttct gcccaggcca
agcccctcgt cctgtgtgga cgccactccc tcctggagct ggtgacagct gcttacagct
                                                                      1020
                                                                      1080
tagetgtett ceccaceaag teetetgaga aggtggeaac cagttgtgte ceetgtagge
caggcctttt tgtacacccc tattcaatgt ggctgtttcc ttctaaggcc aaggaaacgt
                                                                      1140
agtegettte taaaccaagg agtetgaage egtggageet etgeteteet gaggtgatag
                                                                      1200
aaccattece tgaccegggt ggggctagtg agtttettga gtaaactace cacgeaccat
                                                                      1260
tetttttgtt ttgtttttgt tettetagag gtaggatett getatgttge ceaggetggt
                                                                      1320
ctcaaactcc tgggctcaag caattctctc acctcagcct cccaagtagc tgggactaca
                                                                      1380
```

ggcgtgcacc	cccccgcct	ccacccagct	aattttattt	tatttttata	gagctggggt	1440
cttgctatgt	tgcccaagct	ggtcttgaac	tcctggtctc	aagcaatcct	cctacttcag	1500
catcccaaag	tgctgggatt	acagatgtta	gccaccatgc	cctgccccaa	cattctttta	1560
tggccctggg	gatcacttca	gctcaaaccc	cttgctcagg	aagatgtggc	tcagagttgg	1620
acttcttgga	cccagaagca	agtgcttttg	acgctgcaca	caaagacttt	ctgaaattaa	1680
tttagaaaag	ctgtatgcca	ggtgtggtgg	cccacgcctt	taatcccagc	gctttggaag	1740
gctgaggtgc	gttgatcact	tgaggttagg	agtttgagac	caccctggtc	aacgtggtga	1800
aaccccatct	ctactgaaaa	aaaaaaccaa	aaattatctg	ggcatggtgg	cagcctcctg	1860
taatcccagc	tactcgggag	gttgaggcag	gagaatctct	tgaacccgga	aggcaggggt	1920
tgcagtgagc	tgagatcgct	ccactgcact	ctaacctagg	caacagagcg	agactccacc	1980
ccaaaaagaa	agaaagaaaa	actctgaact	ctgggaacaa	ctctgggatg	aggttacttt	2040
ggaatgcagt	cgcaggttcc	ctctacatgt	agcctttgct	tctgccttcc	ccactacatc	2100
ttggagaagg	ttactcctcc	cacacttcct	gggaccacct	gagtaccatt	cctggacctc	2160
ttccccatag	agaattctga	cttccaaccc	tctttgtagg	gatattatac	cctgcctgct	2220
ctgccctgct	cttttctggc	tgtggtgggc	tcagtctgca	taccactagg	gacaatgagg	2280
agccaggctt	gttggggagg	ggtctccttc	tcccactcct	cccgccgtgg	acctcacctg	2340
accctctctc	ctcttgcagc	acagagttga	tgagacgcgt	ccgtcgcttc	cagattgctc	2400
agtacaagtg	cctggtgatc	aagtatgcca	aagacactcg	ctacagcagc	agcttctgca	2460
cacatgaccg	gtcagtccct	gccccctgca	gtcctgtcca	gtggaaaatc	acaaggcaca	2520
ggacacactg	ttaggactct	ctttaatggg	gatggttaat	catttgaaca	ttgaatgatt	2580
caaatcagca	cactttccaa	ggtgcttggc	aaggtagcgc	acactctcca	ctccctgggc	2640
tggagccagt	ggttctccac	tgagggtgat	tttgccgcca	gggtccattt	gacaatgttt	2700
gaagacattt	ctagttgttg	caactggagg	ggggaggga	tgcttttggg	ctttaatgtg	2760
tagaaatcag	ggacactgct	gctaagggtc	ctatggtgca	gaggacggcc	cccatgcaag	2820
aacgagctgg	ccccaaatgt	caggagcctg	ccagtgttca	gaaactctgc	cgtagggttt	2880
cagcttcaca	caggctgcag	actggtttgg	tttggcctgc	acgttgattt	ttgtttaatt	2940
ttttagttgt	ccgttgttgg	ctggctcccc	cgtcacctgg	cagccttcac	gcttccctgt	3000
tttatgtgta	gctgtttgag	ctcgctggac	atttccgcct	gcaacctcag	tttgggagtt	3060
aaattcactt	ccttggcagc	agatgtgggc	ccgatgtttc	tgagcctgag	acgctttgct	3120
tggtcctctg	gacttgtcca	cctgggcacc	cagtggcaaa	gccatgctgt	gccacacatt	3180
atagggcttc	agcctcagag	ccctggctgg	gagctgtatc	cgagagttgc	tatggctgtg	3240
cagagaacag	atccacccgg	cgtgtggcct	tcggtgggag	ctgaggggct	cctgaagcca	3300
gatgctggtg	gagtggaggg	tgcttggggc	ttggagttgc	atgtgggaat	ttaaccgcac	3360
	atgctgtctg					3420
taagatgcga	tgtccacggc	acagggtggt	gttacacctg	gtggggacag	ggaaagcaga	3480
ggaggtcact	tcgttccagc	tgttggaagt	acaacttctg	gagtcagtca	gatccgggat	3540
	ttctgcccgt					3600
	cagcattgat					3660
	tcactttgtc					3720
	ttcacacatt					3780
	ttgtaaagta					3840
	cacccaggct					3900
	gggctcaagt					3960
	ccacacccag					4020
	gtctcgaact					4080
	tgagctgctg					4140
	aatataaaga					4200
gaattttaaa	aggaaacatt	tggctggccc	ctaatggtat	catgggccct	ggtacctgat	4260

```
gaagttggcc tagtctgccc ccagctcctg aacagtggaa gagtttttag tctcattgag
                                                                     4320
                                                                     4380
ctttgtactg gacattacta atttctaatc caaagcatca agtgaagtgg cttgtataaa
taactggttt tcctctggga ggctaaggcg ggtggatcac ttaaaagtta ggagtctgag
                                                                     4440
                                                                     4500
accageetgg ecaacatggt gaaaceecat gtetgetaaa aatacaaaaa ttagetgggt
gtgatggtgt gtggccagta gtcccagcta ctcttgtggc tgaggtggga gaatcgcttg
                                                                     4560
agaccettga gaattgggag gtagagattg cagggageeg agatggegee actgeactee
                                                                     4620
agcctgggtg acagagcaag actctgtttc ataaaaaata aataaataac tggttttctg
                                                                     4680
gacgagggcc tttcccatag gtgctaactt ctcaaagccc ggctgggtga acactgagcc
                                                                     4740
tgctttgcag gtagcaggtg gtcacgacag tgccattccc tggcccctgc attgtggctt
                                                                     4800
ctggcctccc tggccctgct cacgctctgg ctttctcttc ccaggaacac catggaggcg
                                                                     4860
                                                                     4920
etgecegeet geetgeteeg agaegtggee caggaggeee tgggegtgge tgteatagge
atcgacgagg ggcagtttgt aagttggctt gtcttggcat cactcttcct gccttccgct
                                                                     4980
gtgtcctccc gttttccctc gctgacttgg aagttatctg anncttttag taaaataaca
                                                                     5040
aggttaaata gctacaacta gtgttggaat accctctgaa ggcccctttc tagtttccct
                                                                     5100
gtcatagtgt catagtcttg taggattcgt tttacttttt ttttttttt ttttgagacg
                                                                     5160
gagttttgct cttgttgccc aggccggagt acgatggcac aatctcaccg caaactttgc
                                                                     5220
ttcctgggtt caagcaattc tctcctgtct cagcctcccg agtagctggg attacaggca
                                                                     5280
tgcgccacca cgcccagcta attttatatt tttagtagag atggggtttc tccatgttgg
                                                                     5340
                                                                     5400
tcaagctggt ctcaaactcc caacctcagg tgatccgccc cgccttgaac tcccaaagcg
ctgggattac aggcatgagc taccacacct ggccattgta cctttttaaa aatacatata
                                                                     5460
                                                                     5520
tctatttact ggcaagatgc agtgactcac acctgtaatc tcagcctgtg ggaggccaag
gtggacagat cacttgagcc caggagttgg agactcacct gggcaacata gtaaaacccc
                                                                     5580
atctctacca aaaaaaaaa gaaattagcc agtcatagca gcgcacacct gtggtccctg
                                                                     5640
                                                                     5700
ctactcagga ggctgaggca gaaggatgga gcctgggagg tcgaggctgc agtgagtggt
gatagcacca ctgcactcca gcccgggcga caaggccaga ccctgtctca aaaaaaaaag
                                                                     5760
ggggaggtgg ggagtaatgt ttggtttgcc tcatggttcc ttttgcttgt ttcttatacg
                                                                     5820
                                                                     5880
tttattttct tgttgttgaa gtaccttttt tagtagtttt tgcagccagg aggtatagat
gggaagctgc cagtctttgt atggaaatct ttcttttgtc atctagttta agctgggcag
                                                                     5940
caagaggtag gttgatcttg tgtgggtttg ggtttttttt tttttttgag acggagtctt
                                                                     6000
actetgtege ceaggetgga gtgeaatggt gtgatetegg eteaetgeaa cetetgeeae
                                                                     6060
ceggatteaa gegattttee cacetegeet eecaagtagg tgggattaca ggeacecace
                                                                     6120
atcatgcctg gctaattttt gtagagacaa gggttcacca tgttggctag gctggtcttg
                                                                     6180
aactcctgac ctcaggtgat ccacccgcct tggcttccca aagtgttgga attacaggca
                                                                     6240
tgagccgccg tgcccggcct tttttatttt tattttttt gagatggagt cttgctctgt
                                                                     6300
tgccctggct ggagtggagt gacgtgatct tagctcacag caacctccgc cttttgggtt
                                                                     6360
caagcagttc tgcctcatcc ttccgggtag ctgggatcac aggtgcgtgc cacatgcgta
                                                                     6420
mtcatttatg tatttttaat agagatgggg tttcaccatg ttggccagct ggtctggaac
                                                                     6480
tectgacete aggtgateeg catgeeteag etcecaaagt getgggatta caggegtgaa
                                                                     6540
ccacgcctgg tcttgatctt gttgctttga aaagtagcag cgctggtcat tgtgtttttg
                                                                     6600
ctcagaggaa ggccgccatc tctctaatgt tacctctggt caggtattct atctgttctc
                                                                     6660
teteageaca atgtgtgtag gggaagettt gttteattta teetgettta tagetggtgt
                                                                     6720
gccttttcat ttctggggaa ggaatgaagc cattatcact tcaggtattt ctctcctcat
                                                                     6780
                                                                     6840
ccatctctga ggtgttctgg gttccatctt ccagagtgtg ttttgtttca gtgactattt
ttacatctgc tgctctaatt catcatgctc cgttttgttt gacaagttac tgttgggtta
                                                                     6900
tttttaaatt tatgctgttc cttccattat gttcctgaaa atcttttctt agacttttcc
                                                                     6960
agatttttct atttcctcag gaacatattc tgtggttgag tttctgggtt attttctgtt
                                                                     7020
atcttagttt tctttcctct gctttggaga ttttattttt gttagtttat cacaaagaat
                                                                     7080
```

```
gaaactgaaa ctctctccaa ggggtttagc agacttgacc tcttaggtac ttttagggtt
                                                                  7140
gcctcgaagt acacaatgtg gtggtttgat ataaacataa caggaattta tttctcgctc
                                                                  7200
acagaccccc tacgtggttc caggccggtt gatggggagg ccgcccacga ggcggcttag
                                                                  7260
gtcgccctgg ctggctgtat acagacacgg aggggaagag acgtggcgga gcccctgggt
                                                                  7320
gtgaggtttt catgggcctg accagaagct gcaaacgtca cttctgctga tctttcaaag
                                                                  7380
                                                                  7440
actagaacct gggcacaggg ccacctatac gtttagtata cttagtccag ttcgttttt
gtttgttttt aaaaacagtc ttgctctgtg gcccaggctg gagtgcagtg gcgcagtctc
                                                                  7500
                                                                  7560
ggctcactat aacctccatg tcccaggttc aagtgattct cccgcctcag cctcctgagt
agetgggatt acaggettet gecaccatge ceagetaace ttttgtattt ttagtagaga
                                                                  7620
eggggtttea teatgttgae egggetggte tggaacteet aaceteaggt gatetgeetg
                                                                  7680
                                                                  7740
ceteageete ceaaagtget gggattacag egtgageeac caegeetgge cacaettagt
ctagttctat accetggagg aagaataaat gagtttgttt ggtgagtgct tcaaggtete
                                                                  7800
                                                                  7860
tacccgccct gcctcccagc acagagccag gccgctctgg cctgaatacc ctgcccggac
gtcacagggc ctgtcccctc aaaaggccag tcctgccttc ctggttctgt tcttgcccaa
                                                                  7920
                                                                  7980
cattetgtat gagteacage tgeaaattee attecegtgg ggaggetgae gggteeette
ccctgtgcgg ggcatctgcc ctgtggagtt gaggctgcca gtgtccgctc tgggttcccg
                                                                  8040
                                                                  8100
accaccegge agetggeate tecteceege ttgggtatgg ceatteegtt tetgacette
agaggtgcgc ccctgagcac ccccatgcct ctgcgtacgt ggagacgtcg ttgttgctgc
                                                                  8160
                                                                  8220
cccgtgcttg agggactcct ggcgagaaag tgagcccagg ctgggaatag ggctgcagct
gttctctttt gctcccaaac tgtggcctca gaatgcatcc agggattttg catcagcttt
                                                                  8280
                                                                  8340
ggggacatgg ccctctcaga acaaggaagc ttcagctttg gcaaggctct ccctccttca
                                                                  8400
gacctgccgc tgtgagttgt tcaatagctc tgttctcctg gctctgcgta aaccttgttg
acagaggetg acceagacee eegaggeaga aacettteee tteteettee tegacateea
                                                                  8460
                                                                  8520
aatgeeetga gteaggagee agegtatgaa gteetgteee etgtteagee tgtaggaggg
atttctcggt ctacttcctc cctggccagc aagtaaaact tgagttcatt cagtgagtat
                                                                  8580
ttattacacc ctacccagac atcagcattc tgccctggcc tctgtgtgcc cttgttctct
                                                                  8640
tcaagaagtt ccgggtcacc agcctgacca acatggagaa actccgtctc tactaaaaat
                                                                  8700
                                                                  8760
acaaaaatta geegggegtg gtggegeact geetgtaate ceagetaett gggaggetga
ggcaggagaa tcgcttgaac ccggtaggcg aaggttgcag tgagccaaga tcgccccatt
                                                                  8820
8880
                                                                  8940
agaagttcag ggtcttccca ttgcaagcag ttctagatcg aggagagggg ttcctagcat
gggacccagc agaaggactg teettegete etteattgte taegtggaca gtggatgaag
                                                                  9000
ctcagccgaa cctgccttgt tcccgttttc tgggtcagca gggaaagcct ttcacagagt
                                                                  9060
agccaccgtg ccatcctgag gaaggccctg ggtcagaagc ttctgtgctt ctttgtaccc
                                                                  9120
cgggcaagac acacaggtgc tcacactgct ctgtagaaac tgttggcatc caagagagac
                                                                  9180
tcacctggaa atctctggaa aacctgaagc tcctagctgg gggtgctgtg cttcagatgc
                                                                  9240
tggtggtggg tgggcaccct tgcatcaaca gctgcacagt gtgtggtggg cttgcagggt
                                                                  9300
cgcttggcaa tagtaggagc tctgatttat ttttttaaac tttttttctg gctgggcagg
                                                                  9360
tggctcacac ctgtaatccc agcactttgg aaggcctagg cgggcggatc acttgaggtc
                                                                  9420
aggagtttga gaccagccag gccaacatgg tgaaacccca tctctactaa aaatacaaaa
                                                                  9480
                                                                  9540
attagccaag cgtggtggca cacacctgta attccagcta cttgggaggc agaggcacaa
gaattgcttg aacctgggag gcagaggttg cagtgagcca agattatgcc actgcactcc
                                                                  9600
                                                                  9660
agcctggatg acagagcgag actctgtctc aaaaaaaata gacaaagcca ggcgcagtgg
ctcatgcctg taatcccaac actttgggag gccgaggtgg gtgaatcacg aggtcaggag
                                                                  9720
                                                                  9780
atcgagacca tcctggctaa cacggtgaaa ccccgtctct actgaaaata caaaaaaatt
agccaggcgt ggtggtgggc acctgtagtc tcagctactc gggaggctga ggcaggagag
                                                                  9840
tggcgtgaac ccaggaggcg gagcttgcag tgagctgaga tcacgccact gcactccagc
                                                                  9900
9960
```

```
tctgttctac tacacaagta atacaggttg agtattcctt aacctaaatg cctgggacca
                                                                  10020
gaagtgtttc ggatttcagg ttttcgaata tttgcatgtt cataatataa tgagaccttg
                                                                  10080
ggaatgagcc ccaagtgtaa acacaaaatc catttatgtt ttatagacat cttaggcaca
                                                                  10140
tagcctgaga gtaattttat gtatttagta atttgggcgt gagccacagt ttttgactgt
                                                                  10200
gacctgtccc atgaggtcag gtgtggaatt ttccacttgt ggtgggcgct caaaaagttt
                                                                  10260
cagattttgg agcctttcag gttagagaca tgcaatctat aataagttta atctaggaaa
                                                                  10320
                                                                  10380
agttagggte tggcacagag geteaegtet gtgateceag eactttggga ggetgaggea
ggcagatcac tggaagtgct ggacgggtgg ggaagtgccg ggtgcaagaa ccaagctctt
                                                                  10440
tgactatgga cctcagcctg aggttggtca agaggtggag tgagtggggg ctgaggacct
                                                                  10500
                                                                  10560
teatectgaa accetgatge aggagagtet ggggtetgee ttetaccete atgtggeggg
                                                                  10620
tgaaggagca aggttctcaa ctcaggaggg ttcttcccct ctccattccc acccagggga
                                                                  10680
catctcacaa caactagaaa caattttgtc gcagctgggg ggtgggaggt gtgttcctgg
                                                                  10740
catctatcta atgggtgggg gcgagggacg cagcccaaca ccctacagtg cacaggacac
agegagatee ggeeteaaac tggeageeat ggeagegtea geeeteeagg gggegegee
                                                                  10800
tggcgcaggt ggtgtgccgg cccacagctc cttgcaggct gggagctgca ttttcgtgac
                                                                  10860
atgtcatgag tcctcagaga aaaagaggga acgagtgcat ggtggggagg ggccctggcg
                                                                  10920
tgctggagtc tctgggtttc cttctccaga gacccctgca gtcagctgag cgcaatcagt
                                                                  10980
                                                                  11040
cacgttgggc tttgcttgga tctcactgga atttttcgag ccaccctta gtcctcacct
                                                                  11100
tgctaagccc tcacgtctca ataacctcaa acctcagtac ctgggctgag aaagcctgag
                                                                  11160
11220
aaggccagtc tggacatatg aactcaacca gctaagagtg atatgattga ttgatgagaa
tcaccagage acttgccaga gtttcagett etecetggge caaagtgaag tttgetttae
                                                                  11280
acagtaaatg tgctctgtgc aggtcctgaa tttagaaggc tgtgctgtgt catcctgctc
                                                                  11340
                                                                  11400
tgtaaatggc cagtaggacc cccgcccctt ctcaaggcac attacccgtt taaaacgggg
gaggcaagag cacaaagcgc ccacctattc accgaagagc atgtatataa cttagggcct
                                                                  11460
tccatcctta aacaacagga ccttccttgc tcttacggaa aaggaaacag gttcagagac
                                                                  11520
                                                                  11580
gttaattcat tgccaaggtc acacagataa tgggtccagc gaagagtggt gtccgagcc
aaggcagcag gcctttggcc actgcagtgt taaacagcac agctggtgtg gaagtccggt
                                                                  11640
gctgagtcct gggtacctgg actcggaggg aagctggctg cagggggaag gggctgcgca
                                                                  11700
                                                                  11760
gttgtggatg tacctgtcgt ctgctggggg gcgtgcgggt ggacacagtc ccccggcctg
gggagcctcg tgggagaatt aagagttact ccgggccaaa tggccggagt tgtcagatct
                                                                  11820
                                                                  11880
ggcagcgtct tcgctggggc tccagggagc tgctgctggg gtggaagctc tcacactctt
                                                                  11940
tetecaegtg ceettteeag tteeetgaca teatggagtt etgegaggee atggeeaaeg
ccgggaagac cgtaattgtg gctgcactgg atgggacctt ccagaggaag gtaaggcgtc
                                                                  12000
tgatccaggt ctggagctgg gattgaggag ggcaagaggc ttctggatgg gcacagagac
                                                                  12060
                                                                  12120
accagetetg ggtgaccagg geteagecae cacagggtta eggeegaget geteaggett
                                                                  12180
ggctgagcca agggactcca tggtctgtgc agactgcgtg ccatctgttg tggcaggtgc
tttgaattgg caaagggaca gagccgggca tggtgctctg ggggttgggg gaaggactaa
                                                                  12240
                                                                  12300
ggtcagagca aactctcctg gcttcagtac ttgtgaatca gagggtttaa aagaaaaacc
cacctggtaa ggtgctgagc gccctctgtc tttccatggg agcacagcca tttggggcca
                                                                  12360
tectgaacet ggtgeegetg geegagageg tggtgaaget gaeggeggtg tgeatggagt
                                                                  12420
                                                                  12480
getteeggga ageegeetat accaagagge teggeacaga gaaggaggta geteeacetg
                                                                  12540
cettecetge aggeeggegg ggtgggggta tggetetgee teetteetgt cetggeeett
cacccatece etgteeetge ggecaggteg aggtgattgg gggagcagae aagtaccaet
                                                                  12600
                                                                  12660
ccgtgtgtcg gctctgctac ttcaagaagg cctcaggcca gcctgccggg ccggacaaca
aagagaactg cccagtgcca ggaaagccag gggaagccgt ggctgccagg aagctctttg
                                                                  12720
ccccacagca gattctgcaa tgcagccctg ccaactgagg gacctgcaag ggccgcccgc
                                                                  12780
```

```
tecetteetg ceaetgeege etactggaeg etgeeetgea tgetgeeeag ceaeteeagg
                                                                     12840
aggaagtegg gaggegtgga gggtgaccac acettggeet tetgggaact etectttgtg
                                                                     12900
tggctgcccc acctgccgca tgctccctcc tctcctaccc actggtctgc ttaaagcttc
                                                                     12960
ceteteaget getgggaega tegeceagge tggagetgge eeegettggt ggeetgggat
                                                                     13020
ctggcacact ccctctcctt ggggtgaggg acagagcccc acgctgttga catcagcctg
                                                                     13080
cttcttcccc tctgcggctt tcactgctga gtttctgttc tccctgggaa gcctgtgcca
                                                                     13140
gcacctttga gccttggccc acactgaggc ttaggcctct ctgcctggga tgggctccca
                                                                     13200
ccctcccctg aggatggcct ggattcacgc cctcttgttt ccttttgggc tcaaagccct
                                                                     13260
tectacetet ggtgatggtt tecacaggaa caacagcate tttcaccaag atgggtggca
                                                                     13320
ccaaccttgc tgggacttgg atcccagggg cttatctctt caagtgtgga gagggcaggg
                                                                     13380
tccacgcctc tgctgtagct tatgaaatta actaattgaa aattcactgg ttggtggacg
                                                                     13440
cacatttctc tttcacctgg gtttccctgg gtctcatgga cagctccaac ttgatttggg
                                                                     13500
      146
1160
DNA
Homo sapiens
^{<\!400>} 146 cetecgacag cetetecaca ggtaceatga aggtetecge ggeacgeete getgteatee
                                                                        60
tcattgctac tgccctctgc gctcctgcat ctgcctcccc atattcctcg gacaccacac
                                                                       120
cetgetgett tgcetacatt geeegeecae tgeeeegtge ecacateaag gagtatttet
                                                                       180
acaccagtgg caagtgetee aacccagcag tegtetttgt caccegaaag aaccgecaag
                                                                       240
tgtgtgccaa cccagagaag aaatgggttc gggagtacat caactctttg gagatgagct
                                                                       300
aggatggaga gtccttgaac ctgaacttac acaaatttgc ctgtttctgc ttgctcttgt
                                                                       360
cctagcttgg gaggcttccc ctcactatcc taccccaccc gctccttgaa gggcccagat
                                                                       420
tetgaceacg acgageagea gttacaaaaa cetteeccag getggaegtg gtggeteage
                                                                       480
cttgtaatcc cagcactttg ggaggccaag gtgggtggat cacttgaggt caggagttcg
                                                                       540
                                                                       600
agacagcctg gccaacatga tgaaacccca tgtgtactaa aaatacaaaa aattagccgg
gcgtggtagc gggcgcctgt agtcccagct actcgggagg ctgaggcagg agaatggcgt
                                                                       660
gaacceggga geggagettg cagtgageeg agategegee aetgeaetee ageetgggeg
                                                                       720
acagagcgag actccgtctc aaaaaaaaaa aaaaaaaaa aaaaaataca aaaattagcc
                                                                       780
                                                                       840
gcgtggtggc ccacgcctgt aatcccagct actcgggagg ctaaggcagg aaaattgttt
gaacccagga ggtggagget gcagtgaget gagattgtgc cacttcactc cagcctgggt
                                                                       900
gacaaagtga gactccgtca caacaacaac aacaaaaagc ttccccaact aaagcctaga
                                                                       960
agagettetg aggegetget ttgteaaaag gaagteteta ggttetgage tetggetttg
                                                                      1020
ccttggcttt gcaagggctc tgtgacaagg aaggaagtca gcatgcctct agaggcaagg
                                                                      1080
aagggaggaa cactgcactc ttaagcttcc gccgtctcaa cccctcacag gagcttactg
                                                                      1140
gcaaacatga aaaatcgggg
                                                                      1160
      147
1452
DNA
Homo sapiens
^{<400>} 147 ttggtttctg ctgggtgtag gtccttggct ggtcgggctc cggtgttctg cttctccccg
                                                                        60
ctgagctgct gcctggtgaa gaggaagcca tggcgctccg agtcaccagg aactcgaaaa
                                                                       120
ttaatgctga aaataaggcg aagatcaaca tggcaggcgc aaagcgcgtt cctacggccc
                                                                       180
ctgctgcaac ctccaagccc ggactgaggc caagaacagc tcttggggac attggtaaca
                                                                       240
aagtcagtga acaactgcag gccaaaatgc ctatgaagaa ggaagcaaaa ccttcagcta
                                                                       300
ctggaaaagt cattgataaa aaactaccaa aacctcttga aaaggtacct atgctggtgc
                                                                       360
cagtgccagt gtctgagcca gtgccagagc cagaacctga gccagaacct gagcctgtta
                                                                       420
aagaagaaaa actttcgcct gagcctattt tggttgatac tgcctctcca agcccaatgg
                                                                       480
```

540

aaacatctgg atgtgcccct gcagaagaag acctgtgtca ggctttctct gatgtaattc

```
ttgcagtaaa tgatgtggat gcagaagatg gagctgatcc aaacctttgt agtgaatatg
                                                                      600
tgaaagatat ttatgcttat ctgagacaac ttgaggaaga gcaagcagtc agaccaaaat
                                                                      660
acctactggg tcgggaagtc actggaaaca tgagagccat cctaattgac tggctagtac
                                                                      720
                                                                      780
aggttcaaat gaaattcagg ttgttgcagg agaccatgta catgactgtc tccattattg
ateggtteat geagaataat tgtgtgeeca agaagatget geagetggtt ggtgteactg
                                                                      840
ccatgtttat tgcaagcaaa tatgaagaaa tgtaccctcc agaaattggt gactttgctt
                                                                      900
ttgtgactga caacacttat actaagcacc aaatcagaca gatggaaatg aagattctaa
                                                                      960
gagetttaaa etttggtetg ggteggeete taeetttgea etteettegg agageateta
                                                                     1020
agattggaga ggttgatgtc gagcaacata ctttggccaa atacctgatg gaactaacta
                                                                     1080
tgttggacta tgacatggtg cactttcctc cttctcaaat tgcagcagga gctttttgct
                                                                     1140
                                                                     1200
tagcactgaa aattetggat aatggtgaat ggacaccaac tetacaacat tacetgtcat
                                                                     1260
atactgaaga atctcttctt ccagttatgc agcacctggc taagaatgta gtcatggtaa
                                                                     1320
atcaaggact tacaaagcac atgactgtca agaacaagta tgccacatcg aagcatgcta
agatcagcac tetaccacag etgaattetg caetagttea agatttagee aaggetgtgg
                                                                     1380
caaaggtgta acttgtaaac ttgagttgga gtactatact ttacaaacta aaattggcac
                                                                     1440
                                                                     1452
atgtgcatct gt
       148
1658
DNA
       Homo sapiens
<400> 148 ctctctctc atctctctca gaatgacaat tctaggtaca acttttggca tggtttttc
                                                                       60
tttacttcaa gtcgtttctg gagaaagtgg ctatgctcaa aatggagact tggaagatgc
                                                                      120
agaactggat gactactcat tctcatgcta tagccagttg gaagtgaatg gatcgcagca
                                                                      180
ttcactgacc tgtgcttttg aggacccaga tgtcaacacc accaatctgg aatttgaaat
                                                                      240
atgtggggcc ctcgtggagg taaagtgcct gaatttcagg aaactacaag agatatattt
                                                                      300
catcgagaca aagaaattct tactgattgg aaagagcaat atatgtgtga aggttggaga
                                                                      360
aaagagtcta acctgcaaaa aaatagacct aaccactata gttaaacctg aggctccttt
                                                                      420
                                                                      480
tgacctgagt gtcatctatc gggaaggagc caatgacttt gtggtgacat ttaatacatc
acacttgcaa aagaagtatg taaaagtttt aatgcatgat gtagcttacc gccaggaaaa
                                                                      540
ggatgaaaac aaatggacgc atgtgaattt atccagcaca aagctgacac tcctgcagag
                                                                      600
                                                                      660
aaagctccaa ccggcagcaa tgtatgagat taaagttcga tccatccctg atcactattt
taaaggette tggagtgaat ggagteeaag ttattaette agaacteeag agateaataa
                                                                      720
                                                                      780
tagctcaggg gagatggatc ctatcttact aaccatcagc attttgagtt ttttctctgt
cgctctgttg gtcatcttgg cctgtgtgtt atggaaaaaa aggattaagc ctatcgtatg
                                                                      840
gcccagtctc cccgatcata agaagactct ggaacatctt tgtaagaaac caagaaaaaa
                                                                      900
tttaaatgtg agtttcaatc ctgaaagttt cctggactgc cagattcata gggtggatga
                                                                      960
cattcaagct agagatgaag tggaaggttt tctgcaagat acgtttcctc agcaactaga
                                                                     1020
agaatctgag aagcagaggc ttggagggga tgtgcagagc cccaactgcc catctgagga
                                                                     1080
                                                                     1140
tgtagtcgtc actccagaaa gctttggaag agattcatcc ctcacatgcc tggctgggaa
                                                                     1200
tgtcagtgca tgtgacgccc ctattctctc ctcttccagg tccctagact gcagggagag
tggcaagaat gggcctcatg tgtaccagga cctcctgctt agccttggga ctacaaacag
                                                                     1260
cacgctgccc cctccatttt ctctccaatc tggaatcctg acattgaacc cagttgctca
                                                                     1320
                                                                     1380
gggtcagccc attcttactt ccctgggatc aaatcaagaa gaagcatatg tcaccatgtc
cagettetae caaaaccagt gaagtgtaag aaacccagae tgaacttaec gtgagegaea
                                                                     1440
aagatgattt aaaagggaag tetagagtte etagteteee teacageaca gagaagacaa
                                                                     1500
                                                                     1560
aattagcaaa accccactac acagtctgca agattctgaa acattgcttt gaccactctt
cctgagttca gtggcactca acatgagtca agagcatcct gcttctacca tgtggatttg
                                                                     1620
gtcacaaggt ttaaggtgac ccaatgattc agctattt
                                                                     1658
```

<210> 149 <211> 2206 <212> DNA <213> Homo	s sapiens					
<400> 149	sapiens					
ctagtctttc	agccttcagg	ctgtttttgg	cttgaagctc	tettggeete	ctagtttcta	60
cctaatcatg	tccctggtgg	aggccatcag	cctctggaat	gaaggggtgc	tggcagcgga	120
caagaaggac	tggaagggag	ccctggatgc	cttcagtgcc	gtccaggacc	cccactcccg	180
gatttgcttc	aacattggct	gcatgtacac	tatcctgaag	aacatgactg	aagcagagaa	240
ggcctttacc	agaagcatta	accgagacaa	gcacttggca	gtggcttact	tccaacgagg	300
gatgctctac	taccagacag	agaaatatga	tttggctatc	aaagacctta	aagaagcctt	360
gattcagctt	cgagggaacc	agctgataga	ctataagatc	ctggggctcc	agttcaagct	420
gtttgcctgt	gaggtgttat	ataacattgc	tttcatgtat	gccaagaagg	aggaatggaa	480
aaaagctgaa	gaacagttag	cattggccac	gagcatgaag	tctgagccca	gacattccaa	540
aatcgacaag	gcgatggagt	gtgtctggaa	gcagaagcta	tatgagccag	tggtgatccc	600
tgtgggcaag	ctgtttcgac	caaatgagag	acaagtggct	cagctggcca	agaaggatta	660
cctaggcaag	${\tt gcgacggtcg}$	tggcatctgt	ggtggatcaa	gacagtttct	ctgggtttgc	720
ccctctgcaa	ccacaggcag	ctgagcctcc	acccagaccg	aaaaccccag	agatcttcag	780
ggctctggaa	ggggaggctc	accgtgtgct	atttgggttt	gtgcctgaga	caaaagaaga	840
gctccaggtc	atgccaggga	acattgtctt	tgtcttgaag	aagggcaatg	ataactgggc	900
cacggtcatg	ttcaacgggc	agaaggggct	tgttccctgc	aactaccttg	aaccagttga	960
gttgcggatc	caccctcagc	agcagcccca	ggaggaaagc	tctccgcagt	ccgacatccc	1020
agctcctcct	agttccaaag	cccctggaaa	accccagctg	tcaccaggcc	agaaacaaaa	1080
agaagagcct	aaggaagtga	agctcagtgt	tcccatgccc	tacacactca	aggtgcacta	1140
caagtacacg	gtagtcatga	agactcagcc	cgggctcccc	tacagccagg	tccgggacat	1200
ggtgtctaag	aaactggagc	tccggctgga	acacactaag	ctgagctatc	ggcctcggga	1260
cagcaatgag	ctggtgcccc	tttcagaaga	cagcatgaag	gatgcctggg	gccaggtgaa	1320
aaactactgc	ctgactctgt	ggtgtgagaa	cacagtgggt	gaccaaggct	ttccagatga	1380
acccaaggaa	agtgaaaaag	ctgatgctaa	taaccagaca	acagaacctc	agcttaagaa	1440
aggcagccaa	gtggaggcac	tcttcagtta	tgaggctacc	caaccagagg	acctggagtt	1500
tcaggaaggg	gatataatcc	tggtgttatc	aaaggtgaat	gaagaatggc	tggaagggga	1560
gtgcaaaggg	aaggtgggca	ttttccccaa	agtttttgtt	gaagactgcg	caactacaga	1620
tttggaaagc	actcggagag	aagtctagga	tgtttcacaa	actacaaagc	tgaagaaaat	1680
gaagccctat	tacttgtttg	taagatttag	cacccttctg	ctgtatactg	tactgagaca	1740
ttacagtttg	gaagtgttaa	ctatttattc	cctgttaaaa	tttaacctac	tagacaatga	1800
tgtgagtacc	caggatgatt	tcctggggca	cagtgggtga	ggagatgggg	acaggtgaat	1860
ggaggagtta	ggggagagga	aaagtggatg	gaagtgtctg	gaaagggcac	gagagagtct	1920
tccaggtact	gatcctgttt	cttgctctga	gtgctagcta	gccagctgtg	ttcacactgt	1980
				tcataccaca		2040
acctatcatc	atcttacaaa	aacaagacac	ccaagtccag	gcccaaggag	taagtacaaa	2100
tattcctgtt	tctgaaccat	tactgtaatt	ggctcttaag	gcttgaagta	accttatagg	2160
ttactcataa	ggcatataca	aataaacttg	tttgttttct	ttttc		2206
	3 o sapiens					
<400> 150 gccctctccc	acagcggagt	ccaaaacagg	cctaccagtc	agttcttatt	tctattgggt	60
gtttccatgc						120
cctgaggcag	gtaaaagaat	catcaggctc	caggctcata	cagcaacgac	ttctacacca	180

```
gcaacagccc cttcacccag aatgggctgc cctggctaaa aagcagctga aaggcaaaaa
                                                                     240
cccagaagac ctaatatggc acaccccgga agggatetet ataaaaccet tgtattecaa
                                                                     300
                                                                     360
gagagatact atggacttac ctgaagaact tccaggagtg aagccattca cacgtggacc
                                                                     420
atatectace atgtatacet ttaggeeetg gaccateege cagtatgetg gttttagtae
                                                                     480
tgtggaagaa agcaataagt tctataagga caacattaag gctggtcagc agggattatc
agttgccttt gatctggcga cacatcgtgg ctatgattca gacaaccctc gagttcgtgg
                                                                     540
tgatgttgga atggctggag ttgctattga cactgtggaa gataccaaaa ttctttttga
                                                                     600
tggaatteet ttagaaaaaa tgteagttte catgaetatg aatggageag ttatteeagt
                                                                     660
tcttgcaaat tttatagtaa ctggagaaga acaaggtgta cctaaagaga aacttactgg
                                                                     720
                                                                     780
taccatccaa aatgatatac taaaggaatt tatggttcga aatacataca tttttcctcc
                                                                     840
agaaccatcc atgaaaatta ttgctgacat atttgaatat acagcaaagc acatgccaaa
atttaattca atttcaatta gtggatacca tatgcaggaa gcaggggctg atgccattct
                                                                      900
                                                                      960
ggagetggee tataetttag cagatggatt ggagtaetet agaactggae tecaggetgg
cctgacaatt gatgaatttg caccaaggtt gtctttcttc tggggaattg gaatgaattt
                                                                     1020
                                                                     1080
ctatatggaa atagcaaaga tgagagctgg tagaagactc tgggctcact taatagagaa
aatgtttcag cctaaaaact caaaatctct tcttctaaga gcacactgtc agacatctgg
                                                                     1140
                                                                     1200
atggtcactt actgagcagg atccctacaa taatattgtc cgtactgcaa tagaagcaat
                                                                     1260
ggcagcagta tttggaggga ctcagtcttt gcacacaaat tcttttgatg aagctttggg
                                                                     1320
tttgccaact gtgaaaagtg ctcgaattgc caggaacaca caaatcatca ttcaagaaga
atctgggatt cccaaagtgg ctgatccttg gggaggttct tacatgatgg aatgtctcac
                                                                     1380
aaatgatgtt tatgatgctg ctttaaagct cattaatgaa attgaagaaa tgggtggaat
                                                                     1440
ggccaaagct gtagctgagg gaatacctaa acttcgaatt gaagaatgtg ctgcccgaag
                                                                     1500
                                                                     1560
acaagctaga atagattctg gttctgaagt aattgttgga gtaaataagt accagttgga
aaaagaagac gctgtagaag ttctggcaat tgataatact tcagtgcgaa acaggcagat
                                                                     1620
tgaaaaactt aagaagatca aatccagcag ggatcaagct ttggctgaac attgtcttgc
                                                                     1680
                                                                     1740
tqcactaacc qaatqtqctq ctagcqqaga tqqaaatatc ctqqctcttq cagtqqatqc
atctcgggca agatgtacag tgggagaaat cacagatgcc ctgaaaaagg tatttggtga
                                                                     1800
                                                                     1860
acataaagcg aatgatcgaa tggtgagtgg agcatatcgc caggaatttg gagaaagtaa
agagataaca tetgetatea agagggttea taaatteatg gaacgtgaag gtegeagace
                                                                     1920
                                                                     1980
tcgtcttctt gtagcaaaaa tgggacaaga tggccatgac agaggagcaa aagttattgc
                                                                     2040
tacaggattt gctgatcttg gttttgatgt ggacataggc cctcttttcc agactcctcg
                                                                     2100
tgaagtggcc cagcaggctg tggatgcgga tgtgcatgct gtgggcgtaa gcaccctcgc
tgctggtcat aaaaccctag ttcctgaact catcaaagaa cttaactccc ttggacggcc
                                                                     2160
agatattett gteatgtgtg gaggggtgat accaecteag gattatgaat ttetgtttga
                                                                     2220
                                                                     2280
agttggtgtt tecaatgtat ttggteetgg gaetegaatt eeaaaggetg eegtteaggt
gcttgatgat attgagaagt gtttggaaaa gaagcagcaa tctgtataat atcctctttt
                                                                     2340
tgttttagct tttgtctaaa atattatttt agttatgatc aaagaagaga gtaaagctat
                                                                     2400
gtcttcaatt taatttcaat acctgatttg tactttcctt gaaagcttta ctttaaaata
                                                                     2460
ccttacttat aggcctggtg tcatgctata agtatgtaca tacagtttca cttcaaaaaat
                                                                     2520
aaaaaaaaat ccctaaaaac tctctatact ctctataaca atactttatc aagaactctg
                                                                     2580
gacaatggta ttattttaa aaatcatggt gatgtattta ttagaatgtt tcttataaat
                                                                     2640
                                                                     2700
ctctttcatt tttatattaa gaattaaact gtacctaaaa aaactctgac tattcccatt
tctcagttta gcattacatt gtcttgagca ccagaaaata aaatccatat attaattaaa
                                                                     2760
                                                                     2798
acctatcttg aaaaaaaaaa aaaaaaaaa aaaaaaaa
```

<400> 151

<sup>&</sup>lt;210> 151 <211> 3984 <212> DNA <213> HOMO

<sup>&</sup>lt;212> DNA <213> Homo sapiens

```
gtcctttcac gcgtgtcttc gtgttggtgc gcttttcact ggtcataaag tgctgctcac
                                                                     60
ggccgtgaac tgctacageg tgaaggccgc cacccgggtc caggatgctt ttgccgccgc
                                                                    120
caageteetg geeetggeee tgateateet getgggette gteeagateg ggaagggtga
                                                                    180
tgtgtccaat ctagatccca agttctcatt tgaaggcacc aaactggatg tggggaacat
                                                                    240
tgtgctggca ttatacagcg gcctctttgc ctatggagga tggaattact tgaatttcgt
                                                                    300
                                                                    360
cacagaggaa atgatcaacc cctacagaaa cctgcccctg gccatcatca tctccctgcc
categtgacg etggtgtacg tgetgaccaa cetggeetae tteaccacec tgtecaeega
                                                                    420
                                                                    480
gcagatgetg tegteegagg eegtggeegt ggaetteggg aaetateace tgggegteat
gtcctggatc atccccgtct tcgtgggcct gtcctgcttt ggctccgtca atgggtccct
                                                                    540
gttcacatcc tecaggetet tettegtggg gtecegggaa ggecacetge cetecateet
                                                                    600
ctccatgate cacccacage tecteacece egtgeegtee etegtgttea egtgtgtgat
                                                                    660
gacgetgete tacgeettet ecaaggacat etteteegte ateaacttet teagettett
                                                                    720
                                                                    780
caactggctc tgcgtggccc tggccatcat cggcatgatc tggctgcgcc acagaaagcc
tgagettgag eggeecatea aggtgaacet ggeectgeet gtgttettea teetggeetg
                                                                    840
                                                                    900
cctcttcctg atcgccgtct ccttctggaa gacacccgtg gagtgtggca tcggcttcac
catcatcctc agcgggctgc ccgtctactt cttcggggtc tggtggaaaa acaagcccaa
                                                                    960
gtggctcctc cagggcatct tctccacgac cgtcctgtgt cagaagctca tgcaggtggt
                                                                   1020
                                                                   1080
cccccaggag acatagccag gaggccgagt ggctgccgga ggagcatgcg cagaggccag
ttaaagtaga tcacctcctc gaacccactc cggttccccg caacccacag ctcagctgcc
                                                                   1140
catcccagtc ctcgccgtcc ctcccaggtc gggcagtgga ggctgctgtg aaaactctgg
                                                                   1200
tacgaatctc atccctcaac tgagggccag ggacccaggt gtgcctgtgc tcctgcccag
                                                                   1260
1320
tattttttt aaacttaaat tttgggtcaa cttgacacca ctaagatgat tttttaagga
                                                                   1380
gctgggggaa ggcaggagcc ttcctttctc ctgccccaag ggcccagacc ctgggcaaac
                                                                   1440
agagetactg agaettggaa ceteattget accaeagaet tgeactgaag ceagaeaget
                                                                   1500
                                                                   1560
gcccagacac atgggcttgt gacattcgtg aaaaccaacc ctgtgggctt atgtctctgc
cttagggttt gcagagtgga aactcagccg tagggtggca ctgggagggg gtgggggatc
                                                                   1620
tgggcaaggt gggtgattcc tcccaggagg tgcttgaggc cccgatggac tcctgaccat
                                                                   1680
                                                                   1740
aatcctagcc ccgagacacc atcctgagcc agggaacagc cccagggttg gggggtgccg
                                                                   1800
gcatctcccc tagctcacca ggcctggcct ctgggcagtg tggcctcttg gctatttctg
ttccagtttt ggaggctgag ttctggttca tgcagacaaa gccctgtcct tcagtcttct
                                                                   1860
agaaacagag acaagaaagg cagacacacc gcggccaggc acccatgtgg gcgcccaccc
                                                                   1920
                                                                   1980
tgggctccac acagcagtgt cccctgccc agaggtcgca gctaccctca gcctccaatg
                                                                   2040
cattggcctc tgtaccgccc ggcagcccct tctggccggt gctgggttcc cactcccggc
ctaggcacct ccccgctctc cctgtcacgc tcatgtcctg tcctggtcct gatgcccgtt
                                                                   2100
gtctaggaga cagagccaag cactgctcac gtctctgccg cctgcgtttg gaggcccctg
                                                                   2160
ggctctcacc cagtccccac ccgcctgcag agagggaact agggcacccc ttgtttctgt
                                                                   2220
tgttcccgtg aattttttc gctatgggag gcagccgagg cctggccaat gcggcccact
                                                                   2280
                                                                   2340
ttcctgagct gtcgctgcct ccatggcagc agccaaggac ccccagaaca agaagacccc
                                                                   2400
cccgcaggat ccctcctgag ctcggggggc tctgccttct caggccccgg gcttcccttc
tececageca gaggtggage caagtggtee agegteacte cagtgeteag etgtggetgg
                                                                   2460
aggagetgge etgtggeaca geeetgagtg teecaageeg ggageeaacg aageeggaca
                                                                   2520
                                                                   2580
cggcttcact gaccagcgc tgctcaagcc gcaagctctc agcaagtgcc cagtggagcc
                                                                   2640
tgccgccccc acctgggcac cgggaccccc tcaccatcca gtgggcccgg agaaacctga
tgaacagttt ggggactcag gaccagatgt ccgtctctct tgcttgagga atgaagacct
                                                                   2700
                                                                   2760
ttattcaccc ctgccccgtt gcttcccgct gcacatggac agacttcaca gcgtctgctc
ataggacctg catcetteet ggggacgaat tecaetegte caagggacag cecaeggtet
                                                                   2820
ggaggccgag gaccaccagc aggcaggtgg actgactgtg ttgggcaaga cctcttccct
                                                                   2880
```

gcaccg

```
ctgggcctgt tctcttggct gcaaataagg acagcagctg gtgccccacc tgcctggtgc
                                                                     2940
                                                                     3000
attgctgtgt gaatccagga ggcagtggac atcgtaggca gccacggccc caggtccagg
agaagtgctc cctggaggca cggaccactg cttcccactg gggccggcgg ggcccacgca
                                                                     3060
egacgteage etettacett eeegeetegg etaggggtee tegggatgee gttetgttee
                                                                     3120
                                                                     3180
aacctcctgt tctgggaggt ggacatgcct caaggataca gggagccggc ggcctctcga
eggeaegeae tteetgttgg etgetgegge tgtgggegag catggggget geeagegtet
                                                                     3240
                                                                     3300
gttgtggaaa gtagctgcta gtgaaatggc tggggccgct ggggtccgtc ttcacactgc
                                                                     3360
gcaggtetet tetgggegte tgagetgggg tgggagetee teegcagaag gttggtgggg
ggtccagtct gtgatccttg gtgctgtgtg ccccactcca gcctggggac cccacttcag
                                                                     3420
                                                                     3480
aaggtagggg ccgtgtcccg cggtgctgac tgaggcctgc ttccccctcc ccctcctgct
                                                                     3540
gtgctggaat tccacaggga ccagggccac cgcaggggac tgtctcagaa gacttgattt
ttccgtccct ttttctccac actccactga caaacgtccc cagcggtttc cacttgtggg
                                                                     3600
                                                                     3660
cttcaggtgt tttcaagcac aacccaccac aacaagcaag tgcattttca gtcgttgtgc
ttttttgttt tgtgctaacg tcttactaat ttaaagatgc tgtcggcacc atgtttattt
                                                                     3720
atttccagtg gtcatgctca gccttgctgc tctgcgtggc gcaggtgcca tgcctgctcc
                                                                     3780
                                                                     3840
ctgtctgtgt cccagccacg cagggccatc cactgtgacg tcggccgacc aggctggaca
                                                                     3900
ccctctgccg agtaatgacg tgtgtggctg ggaccttctt tattctgtgt taatggctaa
cctgttacac tgggctgggt tgggtagggt gttctggctt ttttgtgggg tttttatttt
                                                                     3960
taaagaaaca ctcaatcatc ctag
                                                                     3984
      152
1446
DNA
Homo sapiens
<400> 152
ctgccattta ggacaagctg gatgatgatg gtttgatagc tccaggggtt cgtgtatagg
                                                                       60
agatgatgaa tctgcttcat ccagaatcac aatcttaaaa ggcgggaact gaggcgactg
                                                                      120
                                                                      180
tggggacatc agtgatcgta agtctcctgg gcccgttatt ctcagattag gtgacggagc
taagacttcg agaccatctc gtcctttttg tatcgcggaa acctgaggaa cgagccggcg
                                                                      240
                                                                      300
gcggtgacct gcacgagaag ccaggctaac tgggtgaagt accatgcaag catttettaa
aggtacatcc atcagtacta aacccccgct gaccaaggat cgaggagtag ctgccagtgc
                                                                      360
gggaagtagc ggagagaaca agaaagccaa acccgttccc tgggtggaaa aatatcgccc
                                                                      420
                                                                      480
aaaatgtgtg gatgaagttg ctttccagga agaagtggtt gcagtgctga aaaaatcttt
agaaggagca gatcttccta atctcttgtt ttacggacca cctggaactg gaaaaacatc
                                                                      540
cactattttg gcagcagcta gagaactctt tgggcctgaa cttttccgat taagagttct
                                                                      600
tgagttaaat gcatctgatg aacgtggaat acaagtagtt cgagagaaag tgaaaaattt
                                                                      660
                                                                      720
tgctcaatta actgtgtcag gaagtcgctc agatgggaag ccgtgtccgc cttttaagat
                                                                      780
tgtgattctg gatgaagcag attctatgac ctcagctgct caggcagctt taagacgtac
                                                                      840
catggagaag gagtcgaaaa ccacccgatt ctgtcttatc tgtaactatg tcagtcgaat
                                                                      900
aattgaaccc ctgacctcta gatgttcaaa attccgcttc aagcctctgt cagataaaat
tcaacagcag cgattactag acattgccaa gaaggaaaat gtcaaaatta gtgatgaggg
                                                                      960
aatagcttat cttgttaaag tgtcagaagg agacttaaga aaagccatta catttcttca
                                                                     1020
aagcgctact cgattaacag gtggaaagga gatcacagag aaagtgatta cagacattgc
                                                                     1080
                                                                     1140
tggggtaata ccagctgaga aaattgatgg agtatttgct gcctgtcaga gtggctcttt
tgacaaacta gaagctgtgg tcaaggattt aatagatgag ggtcatgcag caactcagct
                                                                     1200
cgtcaatcaa ctccatgatg tggttgtaga aaataactta tctgataaac agaagtctat
                                                                     1260
                                                                     1320
tatcacagaa aaacttgccg aagttgacaa atgcctagca gatggtgctg atgaacattt
                                                                     1380
gcaactcatc agcctttgtg caactgtgat gcagcagtta tctcagaatt gttaacgtga
tatatctgga tggggggttt tgtaaataat gaagttgtaa taaaaataaa atgaccaaaa
                                                                     1440
```

1446

<210> 153 <211> 5102 <212> DNA <213> Homo sapiens					
<400> 153 gcttctgcga ctccagttgt	gagageegea	agggcatggg	aattgacgcc	actcaccgac	60
ccccagtctc aatctcaacg					120
cggggctcgg cgagcgaggc					180
ctgacgacgc caagagactc					240
aggccgggcc tgcgggttcc					300
cggagccggc tgtcccgcgc					360
cageeegaae gaeeettgge					420
actcctgtcg gtgctggcca	ctgtgcatgt	gggccagcgg	ctgctgaggc	aacggaggcg	480
gcagctccgg tccgcgcccc	cgggcccgtt	tgcgtggcca	ctgatcggaa	acgcggcggc	540
ggtgggccag gcggctcacc	tctcgttcgc	tcgcctggcg	cggcgctacg	gcgacgtttt	600
ccagatccgc ctgggcagct	gccccatagt	ggtgctgaat	ggcgagcgcg	ccatccacca	660
ggccctggtg cagcagggct	cggccttcgc	cgaccggccg	gccttcgcct	ccttccgtgt	720
ggtgtccggc ggccgcagca	tggctttcgg	ccactactcg	gagcactgga	aggtgcagcg	780
gcgcgcagcc cacagcatga	tgcgcaactt	cttcacgcgc	cagccgcgca	gccgccaagt	840
cctcgagggc cacgtgctga	gcgaggcgcg	cgagctggtg	gcgctgctgg	tgcgcggcag	900
cgcggacggc gccttcctcg	acccgaggcc	gctgaccgtc	gtggccgtgg	ccaacgtcat	960
gagtgccgtg tgtttcggct	gccgctacag	ccacgacgac	cccgagttcc	gtgagctgct	1020
cagccacaac gaagagttcg	ggcgcacggt	gggcgcgggc	agcctggtgg	acgtgatgcc	1080
ctggctgcag tacttcccca	acccggtgcg	caccgttttc	cgcgaattcg	agcagctcaa	1140
ccgcaacttc agcaacttca	tcctggacaa	gttcttgagg	cactgcgaaa	gccttcggcc	1200
cggggccgcc ccccgcgaca	tgatggacgc	ctttatcctc	tctgcggaaa	agaaggcggc	1260
cggggactcg cacggtggtg	gcgcgcggct	ggatttggag	aacgtaccgg	ccactatcac	1320
tgacatette ggegeeagee	aggacaccct	gtccaccgcg	ctgcagtggc	tgctcctcct	1380
cttcaccagg tatcctgatg	tgcagactcg	agtgcaggca	gaattggatc	aggtcgtggg	1440
gagggaccgt ctgccttgta	tgggtgacca	gcccaacctg	ccctatgtcc	tggccttcct	1500
ttatgaagcc atgcgcttct					1560
caacacctct gtcttgggct					1620
gtctgtgaat catgacccag					1680
cttggacaag gatggcctca					1740
gggcaaaagg cggtgcattg			_		1800
catcctggct caccagtgcg					1860
cagttatggt ctaaccatta					1920
catggagete ettgatagtg	_	_		_	1980
agcaagaggc aagctgaaat					2040
cagtttttt ccagttcctc					2100 2160
atcaactgtc catcaggtga					
tatgcaggag cttctgggag					2220 2280
tatatacata ctgcatcttg					2340
atatagacac atacacccaa		_			2400
accaggccat ttttggtggg					2400
gtatattaaa caaagtttca					2460 2520
taaagtgtgt gattgaaggt ttttcaggaa aataacttag					2520
					2640
gtatacttcc ttacttttaa	yyaraaarda	caaayccayc	Lycicaaada	yaaallaald	204U

```
2700
gttgaattag tgagtatagt ggggttccat gagttatcat gaattttaaa gtatgcatta
                                                                     2760
ttaaattgta aaactccaag gtgatgttgt acctcttttg cttgccaaag tacagaattt
gaattatcag caaagaaaaa aaaaaaagcc agccaagctt taaattatgt gaccataatg
                                                                     2820
tactgatttc agtaagtctc ataggttaaa aaaaaaagtc accaaatagt gtgaaatata
                                                                     2880
                                                                     2940
ttacttaact gtccgtaagc agtatattag tattatcttg ttcaggaaaa ggttgaataa
                                                                     3000
tatatqcctt gtgtaatatt gaaaattgaa aagtacaact aacgcaacca agtgtgctaa
aaatgagctt gattaaatca accacctatt tttgacatgg aaatgaagca gggtttcttt
                                                                     3060
                                                                     3120
tcttcactca aattttggcg aatctcaaaa ttagatccta agatgtgttc ttatttttat
aacatcttta ttgaaattct atttataata cagaatcttg ttttgaaaat aacctaatta
                                                                     3180
                                                                     3240
atatattaaa attccaaatt catggcatgc ttaaatttta actaaatttt aaagccattc
                                                                     3300
tgattattga gttccagttg aagttagtgg aaatctgaac attctcctgt ggaaggcaga
                                                                     3360
gaaatctaag ctgtgtctgc ccaatgaata atggaaaatg ccatgaatta cctggatgtt
                                                                     3420
ctttttacga ggtgacaaga gttggggaca gaactcccat tacaactgac caagtttctc
ttctagatga ttttttgaaa gttaacatta atgcctgctt tttggaaagt cagaatcaga
                                                                     3480
                                                                     3540
agatagtett ggaagetgtt tggaaaagae agtggagatg aggteagttg tgttttttaa
                                                                     3600
gatggcaatt actttggtag ctgggaaagc ataaagctca aatgaaatgt atgcattcac
atttagaaaa gtgaattgaa gtttcaagtt ttaaagttca ttgcaattaa acttccaaag
                                                                     3660
                                                                     3720
aaagttctac agtgtcctaa gtgctaagtg cttattacat tttattaagc tttttggaat
ctttgtacca aaattttaaa aaagggagtt tttgatagtt gtgtgtatgt gtgtgtgggg
                                                                     3780
                                                                     3840
tggggggatg gtaagagaaa agagagaaac actgaaaaga aggaaagatg gttaaacatt
                                                                     3900
ttcccactca ttctgaatta attaatttgg agcacaaaat tcaaagcatg gacatttaga
agaaagatgt ttggcgtagc agagttaaat ctcaaatagg ctattaaaaa agtctacaac
                                                                     3960
                                                                      4020
atagcagatc tgttttgtgg tttggaatat taaaaaactt catgtaattt tattttaaaa
                                                                      4080
tttcatagct gtacttcttg aatataaaaa atcatgccag tatttttaaa ggcattagag
tcaactacac aaagcaggct tgcccagtac atttaaattt tttggcactt gccattccaa
                                                                      4140
                                                                      4200
aatattatgc cccaccaagg ctgagacagt gaatttgggc tgctgtagcc tattttttta
                                                                      4260
gattgagaaa tgtgtagctg caaaaataat catgaaccaa tctggatgcc tcattatgtc
                                                                     4320
aaccaggtcc agatgtgcta taatctgttt ttacgtatgt aggcccagtc gtcatcagat
                                                                     4380
gcttgcggca aaagaaagct gtgtttatat ggaagaaagt aaggtgcttg gagtttacct
                                                                      4440
ggcttattta atatgcttat aacctagtta aagaaaggaa aagaaaacaa aaaacgaatg
aaaataactg aatttggagg ctggagtaat cagattactg ctttaatcag aaaccctcat
                                                                      4500
tgtgtttcta ccggagagag aatgtatttg ctgacaacca ttaaagtcag aagttttact
                                                                      4560
                                                                      4620
ccaggttatt gcaataaagt ataatgttta ttaaatgctt catttgtatg tcaaagcttt
gactctataa gcaaattgct tttttccaaa acaaaaagat gtctcaggtt tgttttgtga
                                                                      4680
                                                                      4740
attitictaaa agctiticatg teecagaact tageetttae etgtgaagtg ttactacage
                                                                      4800
cttaatattt tcctagtaga tctatattag atcaaatagt tgcatagcag tatatgttaa
                                                                      4860
tttgtgtgtt tttagctgtg acacaactgt gtgattaaaa ggtatacttt agtagacatt
tataactcaa ggataccttc ttatttaatc ttttcttatt tttgtacttt atcatgaatg
                                                                      4920
cttttagtgt gtgcataata gctacagtgc atagttgtag acaaagtaca ttctggggaa
                                                                      4980
acaacattta tatgtagcct ttactgtttg atataccaaa ttaaaaaaaa attgtatctc
                                                                      5040
attacttata ctgggacacc attaccaaaa taataaaaat cactttcata atcttgaaaa
                                                                      5100
                                                                      5102
aa
       154
3260
DNA
Homo sapiens
                                                                        60
atccagaaag caccatagca accagtgatg tcatgtctga aagcatggtg gagacccatg
```

atcccatact tgggagtgga aaaggggatt ctggggctgc cccagacgtg gatgataaat

120

tatgtctaag	aatgaaactg	gttagtcctg	agactgaggc	gagtgaagag	tctttgcagt	180
tcaacctgga	aaagcctgca	actggtgaaa	gaaaaaatgg	atctactgct	gttgctgagt	240
ctgttgccag	tccccagaag	accatgtctg	tgttgagctg	tatctgtgaa	gccaggcaag	300
agaatgaggc	tcgaagtgag	gatcccccca	ccacacccat	cagggggaac	ttgctccact	360
ttccaagttc	tcaaggagaa	gaggagaaag	aaaaattgga	gggtgaccat	acaatcaggc	420
agagtcaaca	gcctatgaag	cccattagtc	ctgtcaagga	ccctgtttct	cctgcttccc	480
agaagatggt	catacaaggg	ccatccagtc	ctcaaggaga	ggcaatggtg	acagatgtgc	540
tagaagacca	gaaagaagga	cggagtacta	ataaggaaaa	tcctagtaag	gccttgattg	600
aaaggcccag	ccaaaataac	ataggaatcc	aaaccatgga	gtgttccttg	agggtcccag	660
aaactgtttc	agcagcaacc	cagactataa	agaatgtgtg	tgagcagggg	accagtacag	720
tggaccagaa	ctttggaaag	caagatgcca	cagttcagac	tgagaggggg	agtggtgaga	780
	tgctcctggg					840
ttgatatgcc	tcagcctcca	catggccatg	tcttacatcg	tcacatgaga	acaatccggg	900
	acttgtcact					960
	agtaactgag					1020
	cccttcacag					1080
tctcctccaa	ggcatccagc	ttacaccgca	catcaagtgg	gacaagtctc	tcagctatgc	1140
	aagctcaggg					1200
	ttttgcctta					1260
aaggggtcag	tcagacaggg	acgccagtgt	gtgaggagga	tggtgatgca	ggccttggca	1320
	agggaaggct					1380
	cactggaacc					1440
	cttgtcacca					1500
	acgaacagat					1560
	ggctgctgct					1620
	gctccgtgtt					1680
	agatgtcgga					1740
	gggcaaagac					1800
	ggaggatgag					1860
	gtactacagc					1920
	gtccttggag					1980
	aacacctctt					2040
	acggcgcagt					2100
	ccctacccga					2160
	aaaacttatc					2220
	agtaaaacct					2280
	caccggtgaa					2340
	gtttctgggc					2400 2460
	ctccaaactg					2520
	tcctcctttc					2520 2580
	tgaagatttc					2640
	gcattgtcga					2640 2700
	tgtctgggtc					2700 2760
	gccagctggg					2820
	tttccagaat					2820
	gtctgagatc taacaaagat					2940
caagegeeda	caucaaayat	accyclicay	gggcacccga	cgcggcggcg	acygaccect	234U

	2000
catgeceage eteggtgetg aagtgtgetg aageattgea getgeetgtg gtgteacaag	3000
agtgggtgat ccagtgcctc attgttgggg agagaattgg attcaagcag catccaaaat	3060
ataaacacga ttatgtttct cactaaagat acttggtctt actggtttta ttccctgcta	3120
tcgtggagat tgtgttttaa ccaggtttta aatgtgtctt gtgtgtaact ggattccttg	3180
catggatctt gtatatagtt ttatttgctg aacttttatg ataaaataaa	3240
ctttggttgt agtaactggg	3260
<210> 155 <211> 1873	
<211> 1873 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 155 caaactacgt gctgtacagc tgcatcagct gctcgtagac atgtccagca gctggtcgag	60
gtccacgccg cggtaggtga agttgcggaa ggtccggcga gggatctgaa acttgccct	120
taccettegg gatattgeag gacgetgeat catgagegae agtaaatgtg acagteagtt	180
ttatagtgtc caagtggcag actcaacctt cactgtccta aaacgttacc agcagctgaa	240
accaattggc totggggccc aagggattgt ttgtgctgca tttgatacag ttcttgggat	300
aaatgttgca gtcaagaaac taagccgtcc ttttcagaac caaactcatg caaagagagc	360
ttatcgtgaa cttgtcctct taaaatgtgt caatcataaa aatataatta gtttgttaaa	420
tqtqtttaca ccacaaaaaa ctctaqaaqa atttcaaqat qtqtatttqq ttatqqaatt	480
aatggatgct aacttatgtc aggttattca catggagctg gatcatgaaa gaatgtccta	540
	600
ccttctttac cagatgcttt gtggtattaa acatctgcat tcagctggta taattcatag	660
agatttgaag cctagcaaca ttgttgtgaa atcagactgc accctgaaga tccttgactt	720
tggcctggcc cggacagcgt gcactaactt catgatgacc ccttacgtgg tgacacggta	720
ctaccgggcg cccgaagtca tcctgggtat gggctacaaa gagaacgttg atatctggtc	840
agtgggttgc atcatgggag agctggtgaa aggttgtgtg atattccaag gcactgacca	900
tattgatcag tggaataaag ttattgagca gctgggaaca ccatcagcag agttcatgaa	960
gaaacttcag ccaactgtga ggaattatgt cgaaaacaga ccaaagtatc ctggaatcaa	1020
atttgaagaa ctctttccag attggatatt cccatcagaa tctgagcgag acaaaataaa	1020
aacaagtcaa gccagagatc tgttatcaaa aatgttagtg attgatcctg acaagcggat	1140
ctctgtagac gaagctctgc gtcacccata catcactgtt tggtatgacc ccgccgaagc	1200
agaagcccca ccacctcaaa tttatgatgc ccagttggaa gaaagagaac atgcaattga	1260
agaatggaaa gagctaattt acaaagaagt catggattgg gaagaaagaa gcaagaatgg	1320
tgttgtaaaa gatcagcete cagatgcage agtaagtage aacgccacte ettetcagte	
ttcatcgatc aatgacattt catccatgtc cactgagcag acgctggcct cagacacaga	1380
cagcagtett gatgeetega egggaceeet tgaaggetgt egatgatagg ttagaaatag	1440 1500
caaacctgtc agcattgaag gaactctcac ctccgtgggc ctgaaatgct tgggagttga	1560
tggaaccaaa tagaaaaact ccatgttctg catgtaagaa acacaatgcc ttgccctact	1620
cagacetgat aggattgeet gettagatga taaaatgagg cagaatatgt etgaagaaaa	1680
aaattgcaag ccacacttct agagattttg ttcaagatca tttcagttga gcagttagag	
taggtgaatt tgtcaaattg tactagtgac agtttctcat catctgtaac tgttgagatg	1740
attgtgcatg tgaccacaaa tgcttgcttg gacttgccca tctagcactt tggaaatcag	1800 1860
tatttaaatg ccaaataatc ttccaggtag tgctgcttct gaagttatct cttaatcctc	
ttaagtaatt tgg	1873
<210> 156 <211> 3143	
<212> DNA <213> Homo sapiens	
<400> 156 ggggaagtgt gggagcaggt gggctgggca gtggcagaaa cctgatgaca caatctcgcc	60
gcctccctgt gttggtggag gatgtctgca gcagcattta aattctggga gggcttggtt	120
gtcagcagca gcaggaggag gcagagacag catcgtcggg accagactcg tctcaggcca	180
geomptong powers and another anoth	-00

gttgcagcct tctcagccaa acgccgacca aggtacagct tcagtttgct actgggttgt 240 300 gcattcagct gaatttcatg gggaagtcca aattctaagg aaaaaaatgt ggtagtataa aaaggtatca ctgttgtaac ctatgaagat gtcagctatt cctttgaaat attttgcagg 360 420 aaaactcact accatgagaa ttgcagtgat ttgcttttgc ctcctaggca tcacctgtgc 480 cataccagtg agtacagttg catcttaaag aaaattcctg aaaataactg aattgtgtgc ttccatgtgc taggaggaca ttcttgtaat ctttcttcat cttttctgtt tctaaggtta 540 aacaggctga ttctggaagt tctgaggaaa agcaggtaag catcttttat gtttttatat 600 agttaaatca tttactcaat tatggcgaga ggtgcaagaa acgtatttgc tgcgatcaaa 660 tgagttcata tttgtaaagc aatttgaaag agtgcctagc ccacagtaag tgctacataa 720 780 qaqtttgtta aatgaatctg caaaaaaaaa aaaaattaca aaaaggtacc taagggtccg 840 ggtgactata tgcttccatc aagactagtg aagaatggtt gttttttcca ttcatcccta 900 catttctttt tttaataatg ataaacatgc aacttttttg tagctttaca acaaataccc 960 agatgctgtg gccacatggc taaaccctga cccatctcag aagcagaatc tcctagcccc acaggtattt ttaaacttct cataattaaa ctacagtgat gaaagatagc cacactcagg 1020 ccatttgggc tgctcagatg aatcctgccc tgcctgctgg caaacatgtg cttaggacat 1080 1140 tgactgatct gccatgttgg cttctctctg tgttaagcca tccacagatg aggctgaaaa ataaaaactg ctttggatta aaaaggttaa cttttgaata aaaaagctag gcatgtgtga 1200 1260 tgcgcactaa cacgtgccat tccttcttca gaatgctgtg tcctctgaag aaaccaatga 1320 ctttaaacaa gaggtaagtt ctcattttca atcagaggcc catcatgcct tgaagagatg 1380 aaagaaggca ttgcctggat tctcttctga tgaaatttca ttagcaagtt ttccagctaa ttggcagtct aaaacttgct cataaataaa acatgtattt actaaatatc agaaatacta 1440 ggtttcctcg gataacctaa aagccatggt atgtactgtg aatgcaaaga ttctgaaact 1500 1560 aaataaaaag aaagatagta aaagactaat gtgctataaa ggctaaggga aaataaaaac 1620 ccatatatta attttcccgg ccatcttaat tttcagaccc ttccaagtaa gtccaacgaa 1680 agccatgacc acatggatga tatggatgat gaagatgatg atgaccatgt ggacagccag 1740 gactccattg actcgaacga ctctgatgat gtagatgaca ctgatgattc tcaccagtct 1800 gatgagtete accattetga tgaatetgat gaactggtea etgattttee caeggaeetg 1860 ccagcaaccg aagttttcac tccagttgtc cccacagtag acacatatga tggccgaggt gatagtgtgg tttatggact gaggtcaaaa tctaagaagt ttcgcagacc tgacatccag 1920 1980 gtaaatcctt taacagacac acctgatggt tctgactagc gctcaagtct aggaaaccac agtitigcata ticaticati cattcatica ticaticate cattcagcaa gaattcatic 2040 atattctact ttatgaccat tgaatacaaa tctttttctg cttggcggtt tttgtaagtc 2100 2160 tacataattt ctctctagat ttgattctca aacacaattc tactttttga aatcctggat caaagtaaca tgctagtatt atttcagcca gatttagaca atttttagta taagatgacc 2220 2280 taaaagctag agagtggaaa aggattacca tattcccatc cctagccgtt catataatta 2340 ttcttcattt gtgccgtgat tcagtaccct gatgctacag acgaggacat cacctcacac 2400 atggaaageg aggagttgaa tggtgeatac aaggeeatee eegttgeeca ggaeetgaae 2460 gcgccttctg attgggacag ccgtgggaag gacagttatg aaacgagtca gctggatgac cagagtgctg aaacccacag ccacaagcag tccagattat ataagcggaa agccaatgat 2520 2580 gagagcaatg agcattccga tgtgattgat agtcaggaac tttccaaagt cagccgtgaa 2640 ttccacagcc atgaatttca cagccatgaa gatatgctgg ttgtagaccc caaaagtaag 2700 gaagaagata aacacctgaa atttcgtatt tctcatgaat tagatagtgc atcttctgag gtcaattaaa aggagaaaaa atacaatttc tcactttgca tttagtcaaa agaaaaaatg 2760 ctttatagca aaatgaaaga gaacatgaaa tgcttctttc tcagtttatt ggttgaatgt 2820 2880 atggaaactc cctgtaaaca aaagcttcag ggttatgtct atgttcattc tatagaagaa 2940 atgcaaacta tcactgtatt ttaatatttg ttattctctc atgaatagaa atttatgtag 3000

```
aagcaaacaa aatactttta cccacttaaa aagagaatat aacattttat gtcactataa
                                                                     3060
tcttttqttt tttaaqttaq tqtatatttt qttqtqatta tcttttgtgg tgtgaataaa
                                                                     3120
tcttttatct tgaatgtaat aag
                                                                     3143
       157
1584
DNA
       Homo sapiens
<400> 157
cgggatgcgg cgcgccgcgc gttgaacctc cttggcctgg gcgaagctgt gtggaccaag
                                                                       60
caaqtcagqa gtgtggccat gttttctgag caggctgccc agagggccca cactctactg
                                                                      120
                                                                      180
tccccaccat cagccaacaa tgccaccttt gcccgggtgc cagtggcaac ctacaccaac
tecteacaac cetteegget aggagagege agetttagee ggeagtatge ceacatttat
                                                                      240
gccaccegee teatecaaat gagaceette etggagaace gggeeeagea gcaetgggge
                                                                       300
agtggagtgg gagtgaagaa gctgtgtgaa ctgcagcctg aggagaagtg ctgtgtggtg
                                                                      360
ggcactctgt tcaaggccat gccgctgcag ccctccatcc tgcgggaggt cagcgaggag
                                                                       420
                                                                       480
cacaacctgc tececcagec teeteggagt aaatacatac acceagatga egagetggte
ttggaagatg aactgcagcg tatcaaacta aaaggcacca ttgacgtgtc aaagctggtt
                                                                       540
acggggactg tcctggctgt gtttggctcc gtgagagacg acgggaagtt tctggtggag
                                                                       600
qactattqct ttqctqacct tgctccccag aagcccgcac ccccacttga cacagatagg
                                                                       660
                                                                       720
tttgtgctac tggtgtccgg cctgggcctg ggtggcggtg gaggcgagag cctgctgggc
                                                                       780
acceagetge tggtggatgt ggtgaegggg cagettgggg aegaagggga geagtgeage
                                                                       840
gccgcccacg tctcccgggt tatcctcgct ggcaacctcc tcagccacag cacccagagc
                                                                       900
agggatteta teaataagge caaatacete accaagaaaa cecaggeage cagegtggag
gctgttaaga tgctggatga gatcctcctg cagctgagcg cctcagtgcc cgtggacgtg
                                                                       960
                                                                      1020
atgccaggcg agtttgatcc caccaattac acgctccccc agcagcccct ccacccctgc
atgttcccgc tggccactgc ctactccacg ctccagctgg tcaccaaccc ctaccaggcc
                                                                      1080
                                                                      1140
accattqatq gagtcagatt tttggggaca tcaggacaga acgtgagtga cattttccga
                                                                      1200
tacagcagca tggaggatca cttggagatc ctggagtgga ccctgcgggt ccgtcacatc
                                                                      1260
agececacag ecceggacae tetaggttgt tacceettet acaaaactga eccgtteate
                                                                      1320
ttcccagagt gcccgcatgt ctacttttgt ggcaacaccc ccagctttgg ctccaaaatc
                                                                      1380
atccgaggtc ctgaggacca gacagtgctg ttggtgactg tccctgactt cagtgccacg
                                                                      1440
cagacegeet geettgtgaa eetgegeage etggeetgee ageeeateag etteteggge
ttcggggcag aggacgatga cctgggaggc ctggggctgg gcccctgact caaaaaagtg
                                                                      1500
gttttgacca gagaggccca gatggaggct gttcattccc tgcagtgtcg gcattgtaaa
                                                                      1560
                                                                      1584
taaagcctgg cacttgctga tgcg
       DNA
Homo sapiens
                                                                        60
gctgggttta gtaggagace tggggcaagg eceeetgtgg acgaccatet gecagettet
ctcgttccgt cgattgggag gagcggtggc gacctcggcc ttcagtgttt ccgacggagt
                                                                       120
                                                                       180
gaatggegge ggeggetggg atgetgetge tgggettget geaggegggt gggteggtge
                                                                       240
tgggccaggc gatggagaag gtgacaggcg gcaacctctt gtccatgctg ctgatcgcct
                                                                       300
gegeetteae eeteageetg gtetaeetga teegtetgge egeeggeeae etggteeage
tgcccgcagg ggtgaaaagt cetecataca tttteteece aattecatte ettgggcatg
                                                                       360
ccatagcatt tgggaaaagt ccaattgaat ttctagaaaa tgcatatgag aagtatggac
                                                                       420
ctgtatttag ttttaccatg gtaggcaaga catttactta ccttctgggg agtgatgctg
                                                                       480
                                                                       540
ctgcactgct ttttaatagt aaaaatgaag acctgaatgc agaagatgtc tacagtcgcc
tgacaacacc tgtgtttggg aagggagttg catacgatgt gcctaatcca gttttcttgg
                                                                       600
                                                                       660
agcagaagaa aatgttaaaa agtggcctta acatagccca ctttaaacag catgtttcta
```

```
taattgaaaa agaaacaaag gaatactttg agagttgggg agaaagtgga gaaaaaaatg
                                                                      720
                                                                      780
tgtttgaagc tctttctgag ctcataattt taacagctag ccattgtttg catggaaagg
aaatcagaag tcaactcaat gaaaaggtag cacagctgta tgcagatttg gatggaggtt
                                                                      840
                                                                      900
tcagccatgc agcctggctc ttaccaggtt ggctgccttt gcctagtttc agacgcaggg
acagagetea tegggaaate aaggatattt tetataagge aateeagaaa egeagacagt
                                                                      960
                                                                     1020
ctcaaqaaaa aattgatgac attctccaaa ctttactaga tgctacatac aaggatgggc
gtcctttgac tgatgatgaa gtagcaggga tgcttattgg attactcttg gcagggcagc
                                                                     1080
atacatecte aactactagt gettggatgg gettettttt ggecagagae aaaacaette
                                                                     1140
aaaaaaaatg ttatttagaa cagaaaacag tctgtggaga gaatctgcct cctttaactt
                                                                     1200
atgaccagct caaggatcta aatttacttg atcgctgtat aaaagaaaca ttaagactta
                                                                     1260
                                                                     1320
gacctcctat aatgatcatg atgagaatgg ccagaactcc tcagactgtg gcagggtata
                                                                     1380
ccattcctcc aggacatcag gtgtgtttt ctcccactgt caatcaaaga cttaaagact
                                                                     1440
catgggtaga acgcctggac tttaatcctg atcgctactt acaggataac ccagcatcag
gggaaaagtt tgcctatgtg ccatttggag ctgggcgtca tcgttgtatt ggggaaaatt
                                                                     1500
                                                                     1560
ttgcctatgt tcaaattaag acaatttggt ccactatgct tcgtttatat gaatttgatc
tcattgatgg atactttccc actgtgaatt atacaactat gattcacacc cctgagaacc
                                                                     1620
cagttatccg ttacaaacga agatcaaaat gaaaaaggtt gcaaggaacg aatatatgtg
                                                                     1680
attatcactg taagccacaa aggcattcga agagaatgaa gtgtacaaaa caactcttgt
                                                                     1740
                                                                     1800
agtttactgt ttttttaagt gtgtaattct aaaagccagt ttatgattta ggattttgtt
aactgaatgg ttctatcaaa tataatagca tttgacacat tttctaatag ttatgatact
                                                                     1860
tatacatgtg ctttcaggaa gttccttggt gaaacaattg ttgagggggg atctaggtaa
                                                                     1920
ttggcagatt ctaaataata taatttccag atagtaattt taagagtact catcgctctt
                                                                     1980
                                                                     2040
gccaaataag ttcagggtat tcaaatcttg gactagtcct gcaaggtata aagaataaaa
atcccagtga gatacttgga aaccacagtt tattattatt tatctgggca attattgtgt
                                                                     2100
                                                                     2160
gtgtgaggat ggaagggtag ggaataatcg aacatctaaa gccttgaata agagaatact
                                                                     2220
aattgttttg gtatgatgat actcagaaat ggagatatta taggaaaaag aaatcctttg
                                                                     2280
gaattttaac taaaatcact gcatatggga aattaagaga tccaggacca tatttgataa
gagttcctaa aaataatgta attattaatg ctaaagactg ctcatgtatc ttgatctaat
                                                                     2340
tactaaataa attacatatt tatttacctg ataaatatgt atctagttct acaaggtcac
                                                                     2400
                                                                     2460
atttatgtgg aagtccaaag tcaagtcctt aggggataat tttgttttgg gctcagttgt
tecetgette etttttttt ttttttttt tttgagatgg agtetegete tgttgeecag
                                                                     2520
gctggagtgc agtggtgcga tctcagctca ctgcatcctc tgcctcccgg gttcaagcaa
                                                                     2580
ttetetgeet eageeteeca agtagttggg attacaggea cetgecacca tgeetggeta
                                                                     2640
attttttgta tttttagtag agacgggggt ttcactatgt tggctaggct ggtcttgaac
                                                                     2700
tectgageet egtgagteea eeegeettgg eeteecaaag tgetgggatt acaggeatga
                                                                     2760
                                                                     2820
gccaccgcac ctggccttcc ctgcttcctc tctagaatcc aattagggat gtttgttact
actcatattg attaaaacag ttaacaaact tttttctttt taaaatgtga gatcagtgaa
                                                                     2880
                                                                     2940
ctctggtttt aagataatct gaaacaaggt ccttgggagt aataaaattg gtcacattct
gtaaagcaca ttctgtttag gaatcaactt atctcaaatt gtaactcggg gcctaactat
                                                                     3000
atgagatggc tgaaaaaata ccacatcgtc tgttttcact aggtgatgcc aaaatatttt
                                                                     3060
gctttatgta tattacagtt ctttttaaaa cactggaaga ctcatgttaa actctaattg
                                                                     3120
tgaaggcaga atctctgcta atttttcaga ttaaaattct ctttgaaaaa at
                                                                     3172
      159
1146
DNA
Homo sapiens
ggcacgagct cgtgccgatt ctgttttgaa tatagccaga ggaaaaaaagc atggagaaaa
                                                                       60
aactaggaga gtgtcttctc ataaacaacc agccttgaag gctacaagtg acaaggaaaa
                                                                      120
```

```
180
ttctgttccg aatatggcca cagaaacaaa ggatgaacaa atatctggga cagtgtcttc
tcagaaacaa ccagccttga aggctacaag tgacaagaaa gattctgttt cgaatatacc
                                                                  240
cacagaaata aaggatggac aacaatctgg aacagtgtct tctcagaaac aaccggcctg
                                                                  300
                                                                  360
gaaggctaca agtgtcaaga aagattctgt ttcgaatata gccacagaga taaaggatgg
acaaatacgt gggacagtgt cttctcagag acaaccagcc ttgaaggcta caggtgatga
                                                                  420
                                                                  480
qaaaqattot qtttoqaata taqooaqaqa aataaaqqat ggagaaaaat otgggacagt
gtctcctcag aaacaatcgg cccagaaggt tatatttaaa aagaaagttt ctcttttgaa
                                                                  540
                                                                  600
tattgccaca agaataacgg gcggttggaa atctggaaca gagtatcctg agaatctgcc
660
agatgtacaa acatccacac cagaacaaga cttagaaatg gcatcagagg gagagcaaaa
                                                                  720
                                                                  780
gaggettgaa gaatatgaaa ataaccagee acaggtgaaa aaccaaatae attetaggga
                                                                  840
tgaccttgat gacataattc agtcatctca aacagtctca gaggacggtg actcgctttg
                                                                  900
ctqtaattqt aagaatqtca tattactcat tgatcaacat gaaatgaagt gtaaagattg
tgttcaccta ttgaaaatta aaaagacatt ttgtttatgt aaaagattaa cagaacttaa
                                                                  960
                                                                 1020
agataatcac tgtgagcaac ttagagtaaa aattcgaaaa ctgaaaaata aggctagtgt
                                                                 1080
actacaaaag agactatctg aaaaagaaga aataaaatcg cagttaaagc atgaaacact
1140
                                                                 1146
aaaaaa
      160
2200
DNA
Homo sapiens
<400> 160 cgggattact gccaggcaca gcacgacctc tatgcagaca agtgaactgt agaaactgat
                                                                   60
tactgctcca ccaagaagcc cccataagag tggttatcct ggacacagaa gtgttgaatt
                                                                  120
gaaatccaca gagcatttta caagagttct gacctggatg gggtaaacct cagtgcactt
                                                                  180
cttttctgtt ggcctcagta ttactggatt gaagaattgc tgcttcttgt taggaggttc
                                                                  240
atttcactta tcattactta caacttcata ctcaaagcac tgagaatttc aagtggagta
                                                                  300
tattgaagta gacttcagtt tctttgcatc atttctgtat tcaatttttt taattatttc
                                                                  360
ataaccctat tgagtgtttt taactaaata acatggctcg aatgaaccgc ccagctcctg
                                                                  420
tggaagtcac atacaagaac atgagatttc ttattacaca caatccaacc aatgcgacct
                                                                  480
                                                                  540
taaacaaatt tatagaggaa cttaagaagt atggagttac cacaatagta agagtatgtg
aagcaactta tgacactact cttgtggaga aagaaggtat ccatgttctt gattggcctt
                                                                  600
ttgatgatgg tgcaccacca tccaaccaga ttgttgatga ctggttaagt cttgtgaaaa
                                                                  660
ttaagtttcg tgaagaacct ggttgttgta ttgctgttca ttgcgttgca ggccttggga
                                                                  720
                                                                  780
gagetecagt acttgttgce etageattaa ttgaaggtgg aatgaaatae gaagatgeag
tacaattcat aagacaaaag cggcgtggag cttttaacag caagcaactt ctgtatttgg
                                                                  840
agaagtatcg tcctaaaatg cggctgcgtt tcaaagattc caacggtcat agaaacaact
                                                                  900
gttgcattca ataaaattgg ggtgcctaat gctactggaa gtggaacttg agatagggcc
                                                                  960
taatttgtta tacatattag ccaacatgtt ggcttagtaa gtctaatgaa gcttccatag
                                                                 1020
gagtattgaa aggcagtttt accaggcctc aagctagaca gatttggcaa cctctgtatt
                                                                 1080
                                                                 1140
tgggttacag tcaacctatt tggatacttg gcaaaagatt cttgctgtca gcatataaaa
                                                                 1200
tgtgcttgtc atttgtatca attgaccttt ccccaaatca tgcagtattg agttatgact
tgttaaatct attcccatgc cagaatctta tcaatacata agaaatttag gaagattagg
                                                                 1260
tgccaaaata cccagcacaa tacttgtata tttttagtac catacagaag taaaatccca
                                                                 1320
ggaactatga acactagacc ttatgtggtt tattccttca atcatttcaa acattgaaag
                                                                 1380
tagggeetae atggttattt geetgeteae tttatgttta eateteeeae atteataeea
                                                                 1440
1500
                                                                 1560
tattttacgt gtttccatgt atctcacttt gtgctgtatt aaaaaaacct ccattttgaa
```

```
aatctacgtt gtacagaagc acatgtcttt aatgtcttca gacaaaaaag ccttacatta
                                                                    1620
                                                                    1680
atttaatgtt tgcactctga ggtgcaactt aacagggagg gcctgagaaa agaatgggag
ggggctatta attatttttt agcaaaatgt tgcctttgtc ttgtgcaaac atgtagaata
                                                                    1740
tgctctttaa tctagtaaaa tattttttta aaaggtagag atgctttgtt attgtaatca
                                                                    1800
taaacttcct gaaattcttg taattttttc ccatacttat cagaagtgtg tttaccaact
                                                                    1860
tatttttgtt tgaaagtgtg atttttttt tccttcccaa cctctcttgc aaaaaaagaa
                                                                    1920
                                                                    1980
atgggtttct gctaatgaat tgagcagaga tctaatattt tatatgcctt ttgagctgtg
taagttaata tttgatactt gacaatttgt tttattatgt aattgataaa atggtgatgt
                                                                    2040
gtattaatgt tagttcaacc atatatttat actgtctggg gatgtgtggt tatagttctg
                                                                    2100
tgggagaaat aattttgtca gtgttcacca gcttgtaaaa acttagtgcg agagctgaaa
                                                                    2160
catctaaata aataatgaca tgcatttatc atcattgaaa
                                                                    2200
      161
997
DNA
Homo sapiens
<\!\!400\!\!> 161 ttcaccgacc tcaatctggt gcagtccctc aggcagtttc tatggagctt tegectaccc
                                                                      60
ggagaggccc agaaaattga ccggatgatg gaggccttcg cccagcgata ctgcctgtgc
                                                                     120
aaccetgggg ttttccagte cacagacacg tgctatgtge tgtccttcge cgtcatcatg
                                                                     180
etcaacacca gtetecacaa teccaatgte egggacaage egggeetgga gegetttgtg
                                                                     240
gccatgaacc ggggcatcaa cgagggcggg gacctgcctg aggagctgct caggaacctg
                                                                     300
                                                                     360
cacaccttct tcaacccgga ccgggagggc tggctcctga agctgggagg gggccgggtg
                                                                     420
aagacgtgga agcggcgctg gtttatcctc acagacaact gcctctacta ctttgagtac
                                                                     480
                                                                     540
accacggaca aggagecccg aggaatcate eccetggaga atetgageat ecgagaggtg
gacgaccccc ggaaaccgaa ctgctttgaa ctttacatcc ccaacaacaa ggggcagctc
                                                                     600
                                                                     660
atcaaagcet gcaaaactga ggcggacggc cgagtggtgg agggaaacca catggtgtac
cggatctcgg ccccacaca ggaggagaag gacgagtgga tcaagtccat ccagtcggct
                                                                     720
                                                                     780
gtgagtgtgg accccttcta tgagattctg acagcgagag agaagcggat ttcagtcaag
aagaagcagg agcagccctg accccctgcc cccaactcca ttatttatta cggagctgcc
                                                                     840
ccgcctgggt ggccggaccc ctgggccttg gggctgtgga tcctggttcc ctgtttggaa
                                                                     900
aattcaccac ctctagctcc tcactgttct ttgtaattaa cacgctgttg gtaatcttat
                                                                     960
taattattta aaaaaaaaa aaaaaaaa aaaaaaa
                                                                     997
       DNA
Homo sapiens
<400> 162
agcatttcag gccccggaca ggaggcagtg ccgcttcggc cgaaggccga gccgcccgag
                                                                      60
ggctctggga tggtgtggga ccggcaaacc aagatggagt atgagtggaa acctgacgag
                                                                     120
caagggette ageaaateet geagetgttg aaggagteee agteeecaga caccaccate
                                                                     180
cagagaaccg tgcaacaaaa actggaacaa cttaatcagt atccagactt taacaactac
                                                                     240
ttgatttttg ttcttacaaa attaaaatct gaagatgaac ccacaagatc attgagtggt
                                                                     300
cttatcttga agaataatgt gaaagcacac tttcagaact tcccaaatgg tgtaacagac
                                                                     360
tttattaaaa gtgaatgttt aaataatatt ggtgactcct ctcctctgat tagagccact
                                                                     420
gttggtattt tgatcacaac tatagcctcc aagggagaat tgcagaattg gcctgacctc
                                                                     480
ttaccaaaac tctgtagcct gttggattct gaagattata atacctgtga gggagcattt
                                                                     540
                                                                     600
ggtgcccttc agaagatttg tgaagattct gctgagattt tagacagtga tgttttagat
cgtcctctca acatcatgat tcccaaattt ttacagttct tcaagcatag tagtccaaaa
                                                                     660
```

720

ataaggtete aegetgttge atgtgteaat cagtttatea teagtaggae teaageteta

```
atgttgcaca ttgattcttt tactgagaat ctctttgcat tagctggtga tgaagaacca
                                                                   780
                                                                   840
gaggtacgga aaaatgtgtg ccgagcactt gtgatgttgc tcgaagttcg aatggatcgc
                                                                   900
ctqcttcctc acatqcataa tatagttgag tacatgctac agaggactca agatcaagat
gaaaatgtgg ctttagaagc ctgtgaattt tggctaactt tagctgaaca gccaatatgc
                                                                   960
aaagatgtac tcgtaaggca tcttcctaag ttgattcctg tgttagtgaa tggcatgaag
                                                                  1020
                                                                  1080
tactcagaca tagatattat cctacttaag ggtgatgttg aagaagacga aacgattcct
gatagtgaac aggatatacg gccacgtttt caccgatcga ggacggtggc tcagcagcat
                                                                  1140
                                                                  1200
gatgaagatg gaattgaaga ggaagacgat gatgatgatg aaattgatga tgatgataca
atttcagact ggaatctaag aaaatgttct gctgctgccc tggatgttct tgcaaatgtg
                                                                  1260
                                                                  1320
tategtgatg aactgetgee acatattttg cecettttga aagaattaet tttteateat
gaatgggttg ttaaagaatc aggcattttg gttttaggag caattgctga aggttgcatg
                                                                  1380
cagggcatga ttccatactt gcctgagctt attcctcacc ttattcagtg cctctctgat
                                                                  1440
aaaaaggctc ttgtgcgttc cataacatgc tggactctta gccgctatgc acactgggtg
                                                                  1500
gtcagccagc cgccagacac gtacctgaag ccattaatga cagaattgct aaagcgcatc
                                                                  1560
                                                                  1620
ctggacagca acaagaggt acaagaagct gcctgcagtg cctttgctac cctagaagag
gaggettgta cagaacttgt teettaeett gettatatae ttgataeeet ggtetttgea
                                                                  1680
                                                                  1740
tttagtaaat accagcataa gaacctgctc attctttacg atgccatagg aacattagca
gattcagtag gacatcattt aaacaaacca gaatatattc agatgctaat gcctccactg
                                                                  1800
atccagaaat ggaacatgtt aaaggatgaa gataaagatc tcttcccttt acttgagtgc
                                                                  1860
ctatcttcag ttgccacagc actgcagtct ggattccttc cgtactgtga acctgtgtat
                                                                  1920
                                                                  1980
cagogttgtg taaacctagt acagaagact cttgcacaag ccatgctaaa caatgctcaa
                                                                  2040
ccagatcaat atgaagctcc agataaagat tttatgatag tggctcttga tttactgagt
                                                                  2100
ggcctggctg aaggacttgg aggcaacatt gaacagctgg tagcccgaag taacatcctg
acactaatgt atcagtgcat gcaggataaa atgccagaag ttcgacagag ttcttttgcc
                                                                  2160
ctgttaggtg acctcacaaa agcttgcttt cagcatgtta agccttgtat agctgatttc
                                                                  2220
                                                                  2280
atgccaatat tgggaaccaa cctaaatcca gaattcattt cagtctgcaa caatgccaca
tgggcaattg gagaaatctc cattcaaatg ggtatagaga tgcagcctta tattcctatg
                                                                  2340
                                                                  2400
gtgttgcacc agcttgtaga aatcattaac agacccaaca caccaaagac gttgttagag
                                                                  2460
aatacagcaa taacaattgg tcgtcttggt tacgtttgtc ctcaagaggt ggcccccatg
                                                                  2520
ctacagcagt ttataagacc ctggtgcacc tctctgagaa acataagaga caatgaggaa
aaggattcag cattccgtgg aatttgtacc atgatcagtg tgaatcccag tggcgtaatc
                                                                  2580
caagatttta tattttttg tgatgccgtt gcatcatgga ttaacccaaa agatgatctc
                                                                  2640
                                                                  2700
agagacatgt tctgtaagat ccttcatgga tttaaaaatc aagttggcga tgaaaattgg
                                                                  2760
aggegtttet etgaceagtt teetetteee ttaaaagage gtettgeage tttttatggt
gtttaatcta atacacttaa gctgcagtcc caaaattagg ggtccttcag tcttggagac
                                                                  2820
tataagggag cctctgcacc cagggaaaat gttacccttt acagggggga agggtaaacc
                                                                  2880
agtagggaat acagtacaat cccaacccta ctgggagggg cgggagggag gtgttgccgt
                                                                  2940
cactgtatta agtcgatgtt gggaaacgtt ttaacatctg gagcctttgt gggtggaaat
                                                                  3000
                                                                  3054
163
1743
DNA
Homo sapiens
60
egegeegeeg eegecteage eteggeeetg egetgegege eeggeeegtg etgeeatgge
                                                                   120
                                                                   180
ctgccgccg cgaagcccgc cgaggcatca gagccgctgc gacggtgacg ccagcccgcc
gtcccccgcg cgatggagcc tgggacggaa gcgcagagcc gacggcaggc gctggaggcc
                                                                   240
```

cgaagacgcc gaggaggcag agcaccgcgg cgccgagcgc agacccgaga gctttaccac

300

```
tectgaagge eetaaaeeee gtteeagatg etetgaetgg geaagtgeag ttgaagaaga
                                                                  360
tqaaatqaqq accaqaqtta acaaagaaat ggcaagatat aaaaggaaac tcctcatcaa
                                                                  420
tgactttgga agagagagaa aatcatcatc aggaagttct gattcaaagg agtctatgtc
                                                                  480
tactgtgccg gctgactttg agacagatga aagtgtccta atgaggagac agaagcagat
                                                                  540
                                                                  600
caactatggg aagaacacaa ttgcctacga tcgttatatt aaagaagtcc caagacacct
tegacaacet ggeatteate ceaagaceee taataaattt aagaagtata gtegaegtte
                                                                  660
atgggaccag caaatcaaac tctggaaggt ggctctgcat ttttgggatc ctccagcgga
                                                                  720
                                                                  780
agaaggatgt gatttgcaag aaatacaccc tgtagacctt gaatctgcag aaagcagctc
                                                                  840
cgagececag accagetete aggatgaett tgatgtgtae tetggeacae eeaccaaggt
gagacacatg gacagtcaag tggaggatga gtttgatttg gaagcttgtt taactgaacc
                                                                  900
                                                                  960
cttgagagac ttctcagcca tgagctaact gccccctggc ggccaggaag agaaacagct
cctccccgac taggtggaag gctggccagg caccaagcat gtgtgtgcac ttgtacctgg
                                                                 1020
tggtttetet gttageagte cattagetea tgetgaatta tttttgeett aetttettaa
                                                                 1080
gaaacattaa ttttatgtat agtgagtata ttttgcatgt tttaaattgt aaatggagct
                                                                 1140
                                                                 1200
aagtecaaga aagtaettga agetetette cagegagett aattgegtaa teeetgttgt
                                                                 1260
cctccagggt aagctgacac gtctacataa ctggttttcc acaggcatct tcagttattg
cttgtcaggt ggactgtttt ggatttaacc atgtaatcca tgggaccaat tgagagtcag
                                                                 1320
ctacttttat aggcatcaaa gtattctcag acacctttaa tatctttatg gaaacttaat
                                                                 1380
ttttggcctt ttatcaatat gtcataacag cattctgaag tcagacattg ttaaattgag
                                                                 1440
                                                                 1500
ctattaaact aatgagtttt atgtaagtta tatggtctta atttggtatt tgtaaatagc
                                                                 1560
actagttaga ctctttagaa tactccaaga gttagggcag cagagtggag cgatttagaa
                                                                 1620
agaacatttt aaaacaatca gttaatttac catgtaaaat tgctgtaaat gataatgtgt
acagattttc tgttcaaata ttcaattgta aacttcttgt taagactgtt acgtttctat
                                                                 1680
                                                                 1740
1743
aaa
      164
3768
DNA
Homo sapiens
^{<\!400>} 164 cctctgaccc ttttggtcgc taggagtcag ccgactcagt acacaggact cactgaatgg
                                                                   60
agacacaagg ctcctccagg gagtggcggc tcatggcaat cctagaatgg tcaccagcca
                                                                  120
ggctttagag acccacacag agggcgttct gacccaaagt tgcactgggg aactccaagt
                                                                  180
ttggggattc tttgaattta actctttttc tagctacatt tcctattatt tgtccaattc
                                                                  240
ttaccaaaca tctctgttca cattctgaag ctgggatctg actggcagag ctagtagatg
                                                                  300
ctgactattc agatggagcc ctgacattgg ctttctcagc ttggctgtga ctggcagcag
                                                                  360
gtttgcggga gaactgtgtg tcccagaaca tgactggcta cacctgcacc tcagcaagat
                                                                  420
                                                                  480
tggggcaggg cagttatctt caaaaagctg tgtaggtggg gcagtcatta ctgacaaatc
cagtgcagac ccaggatggc ccaaacactg gcttatcctt tctgaatctc atctcccaca
                                                                  540
                                                                  600
gctgtaaagc ggggtggtgc tcgctacctc acagaggtgt tgtaaagatt agatgtaatc
                                                                  660
ttgccaagca gccactttgt aaactgtata gtcttatgca gatggaagga agggcctgtg
                                                                  720
cctaccttga tcatagcact aaacaaactg tactgtattt tcattcctct tagttatctc
cctaaaaaga ctctgagttc cttgaacaca ggaaggtgtt ttatttgatt ttgttatcct
                                                                  780
cagcatgtag cagtgtctga cacacagtag gtgctctatc actgtgagag ggatggatgg
                                                                  840
                                                                  900
tagatggatg gagggggat gatgaatgga gggataatga gtggatgaat gagggaatgg
                                                                  960
                                                                 1020
gtggatggat ggatggaggg atggaggaac agatagatag atggagggat gggtgggtga
                                                                 1080
tggatggata gatggatgga gggagggatg atgaatggag ggataatgaa tggatgaatg
                                                                 1140
```

```
atggatgaac acatggatgg atggatagat ggatagatgg aggaactggt ggattttgga
                                                                   1200
tggatgggtg gatggataga tgaatgaatg cctggataga caaagagatg atggatagat
                                                                   1260
                                                                   1320
1380
gtggtggatg gatagatgag tgaatgcatg gatagacaaa gagatgatgg atggatgaat
                                                                   1440
taagggatga cagatggatg gatggatgag taactggatg gacaagtgga taaatggata
gatggttgaa tacctgaatg gattgaagga ggatgcatgg atgtaagata aggctaatca
                                                                   1500
                                                                   1560
tectecacte tetttetttg caaaaceate cacceattta etcaataaac atttatteag
ttcaaacttg gcacaaagca ccatgtgagg cccaagagat acgtgggtta ataaaacaga
                                                                   1620
gctcctgccc tcctgaaaac tgcaaagaaa ggggcgtggc ttcctgagtt caaatcccaa
                                                                   1680
                                                                   1740
ctctgccagc gactagctgt acatcagtga tgtttcccta ctttctctca attaaatagg
                                                                   1800
gataatgtca gtacctatca cattgggagg tcttgcgggg attaaatgag ttaccaaatg
ccaagtgttt gggacagggc ctggcaccca gcaaagtctc ttgtgagtgc tggctgctat
                                                                   1860
                                                                   1920
tatcctaatg gagaagatgg catgaaaacc aggaaatagg atgccctttg ggaagcaatg
                                                                   1980
caacaggaac ttacacaaag aaaggaaagg aggaagcaat tagtggtgtc tcaaaggagt
atgtcaagaa aaacttttca gagggaaacc tttgagcagg gccatgaaaa caggagttct
                                                                    2040
                                                                   2100
ctaagagatt gtggacttgc ctgggaccac ctggctataa gcacaaaacc atccggttcc
tttctgtcac ttctggcggg tgaggggtct ctggcaaagg ggcagaaggt gcgtgagagg
                                                                    2160
                                                                    2220
ttgcgaatgg caggactgtc ctggccagcc ggggcacctg gtggccaagc ttagaaacat
                                                                    2280
gacaggtcct cttgggaggg ctgaccgcag ggagcgttgg gtttcaggct gctggcgtcg
gettetgtgg tgecetttet gteggetatg agagtecaga cagtgeecaa cetecteece
                                                                    2340
                                                                    2400
ttettteeae aegeaeaaee aeeceaeeee etgtggeetg agetgteetg eetegeeaea
atggcacctg ccctaaaata gcttcccatg tgagggctag agaaaggaaa agattagacc
                                                                    2460
                                                                   2520
ctccctggat gagagagaa aagtgaagga gggcagggga gggggacagc gagccattga
                                                                    2580
gcgatctttg tcaagcatcc cagaaggtat aaaaacgccc ttgggaccag gcagcctcaa
accocagetg ttggggccag gacacccagt gagcccatac ttgctctttt tgtcttcttc
                                                                    2640
                                                                    2700
agactgcgcc atggggctca gcgacgggga atggcagttg gtgctgaacg tctgggggaa
ggtggaggct gacatcccag gccatgggca ggaagtcctc atcaggtaaa aggaagagat
                                                                    2760
                                                                    2820
tccattgccc ctgccaccca caccctaaga tcaagggtgt tcagctgcaa ggtggaaagt
                                                                    2880
ttgcacgtgg ggtaggtcag ttggctgcat tagttaaggg tgttagaacg gtcacttgct
                                                                    2940
ttttctttgc ttttaagtgt cagggattgg actcaggaga gggaaaggag ccatttcagg
                                                                   3000
ctgatatcag cagctggagg aagcatgaga atcaaaccta ggatgctcag agtccaccag
gaagaatttt agaattatag acagtcagag ttaacaaggg tcctgagaga ttttgtacag
                                                                   3060
                                                                   3120
ccacctctct tacaggatga ggacaaaaag cgactgagaa ggggaggaca tttccagagt
cacageteat taaatgetet taaagtgtea aggttaagae atgetettea aggggagaea
                                                                   3180
gatetggttc tagacttggc tetgecactg agecactggg tgacetttgg gaaggtacte
                                                                   3240
aacctctcgg agcctcaatt tcctctcctg tacagtgagg ggatatccta atatctatat
                                                                   3300
cctagaggag atgtgagaat taaataaaat aatgcatgca agaggcctgg catggttcct
                                                                    3360
ggcatatact gagtcctaga aatgttagta gctattactg atgaagccca ggctagggac
                                                                    3420
                                                                    3480
ctttcaaagc attgcaatta gagaacagaa gatagaggct cattagtgac cttcgatgtt
                                                                    3540
gagtatgtct ctagtttgag aggtctgaat gatgtggtct gcaagtatat cctgccttct
                                                                    3600
accacaaggg attccagaat acaccaaaga aaacaaaatt ctgaggtttg taaatagagg
                                                                    3660
gtggctgtgg tttgtacata gaagctcatc tcctcgttgc cttctatccc aaaggtgata
cactettete ttggcccett ccctcaccat tctgagctgg ttccctcaga agtetaatag
                                                                    3720
gttaagaatc aacgtttctg ccaacgggag gaaggaagtg ggcgccgg
                                                                    3768
```

<sup>&</sup>lt;210> 165 <211> 1172 <212> DNA <213> Homo sapiens <400> 165

```
gagacattcc tcaattgctt agacatattc tgagcctaca gcagaggaac ctccagtctc
                                                                       60
agcaccatga atcaaactgc gattctgatt tgctgcctta tctttctgac tctaagtggc
                                                                      120
attcaaggag tacctctctc tagaaccgta cgctgtacct gcatcagcat tagtaatcaa
                                                                      180
                                                                      240
cctgttaatc caaggtcttt agaaaaactt gaaattattc ctgcaagcca attttgtcca
                                                                      300
cqtqttqaqa tcattqctac aatgaaaaag aagggtgaga agagatgtct gaatccagaa
tegaaggeea teaagaattt aetgaaagea gttageaagg aaatgtetaa aagateteet
                                                                      360
taaaaccaga ggggagcaaa atcgatgcag tgcttccaag gatggaccac acagaggctg
                                                                      420
cctctcccat cacttcccta catggagtat atgtcaagcc ataattgttc ttagtttgca
                                                                      480
gttacactaa aaggtgacca atgatggtca ccaaatcagc tgctactact cctgtaggaa
                                                                      540
ggttaatgtt catcatccta agctattcag taataactct accctggcac tataatgtaa
                                                                      600
gctctactga ggtgctatgt tcttagtgga tgttctgacc ctgcttcaaa tatttccctc
                                                                      660
acctttccca tcttccaagg gtactaagga atctttctgc tttggggttt atcagaattc
                                                                      720
tcagaatctc aaataactaa aaggtatgca atcaaatctg ctttttaaag aatgctcttt
                                                                      780
acttcatgga cttccactgc catcctccca aggggcccaa attctttcag tggctaccta
                                                                      840
catacaattc caaacacata caggaaggta gaaatatctg aaaatgtatg tgtaagtatt
                                                                      900
cttatttaat gaaagactgt acaaagtata agtcttagat gtatatattt cctatattgt
                                                                      960
tttcagtgta catggaataa catgtaatta agtactatgt atcaatgagt aacaggaaaa
                                                                     1020
                                                                     1080
ttttaaaaat acagatagat atatgctctg catgttacat aagataaatg tgctgaatgg
ttttcaaata aaaatgaggt actctcctgg aaatattaag aaagactatc taaatgttga
                                                                     1140
aagatcaaaa ggttaataaa gtaattataa ct
                                                                     1172
       DNA
Homo sapiens
<400> 166
tcaacgcctg cctcccctcg agcgtcctca gcgcagccgc cgcccgcgga gccagcacga
                                                                       60
                                                                      120
acgageceag caceggeegg atggagegte egeaaceega cageatgeee caggatttgt
cagaggccct gaaggaggcc accaaggagg tgcacaccca ggcagagaat gctgagttca
                                                                      180
                                                                      240
tgaggaactt tcagaagggc caggtgaccc gagacggctt caagctggtg atggcctccc
                                                                      300
tgtaccacat ctatgtggcc ctggaggagg agattgagcg caacaaggag agcccagtct
tegeceetgt etaetteeca gaagagetge acegeaagge tgecetggag caggacetgg
                                                                      360
ccttctggta cgggccccgc tggcaggagg tcatccccta cacaccagcc atgcagcgct
                                                                      420
atgtgaagcg getecacgag gtggggegea cagageeega getgetggtg geeeacgeet
                                                                      480
acacccgcta cctgggtgac ctgtctgggg gccaggtgct caaaaagatt gcccagaaag
                                                                      540
ccctggacct gcccagctct ggcgagggcc tggccttctt caccttcccc aacattgcca
                                                                      600
gtgccaccaa gttcaagcag ctctaccgct cccgcatgaa ctccctggag atgactcccg
                                                                      660
                                                                      720
cagtcaggca gagggtgata gaagaggcca agactgcgtt cctgctcaac atccagctct
ttgaggagtt gcaggagctg ctgacccatg acaccaagga ccagagcccc tcacgggcac
                                                                      780
cagggetteg ccagegggec ageaacaaag tgeaagatte tgeceeegtg gagacteeca
                                                                      840
gagggaagcc cccactcaac acccgctccc aggctccgct tctccgatgg gtccttacac
                                                                      900
                                                                      960
tcagetttet ggtggcgaca gttgetgtag ggetttatge catgtgaatg caggeatget
ggctcccagg gccatgaact ttgtccggtg gaaggccttc tttctagaga gggaattctc
                                                                     1020
ttggctggct tccttaccgt gggcactgaa ggctttcagg gcctccagcc ctctcactgt
                                                                     1080
gtccctctct ctggaaagga ggaaggagcc tatggcatct tccccaacga aaagcacatc
                                                                     1140
caggcaatgg cctaaacttc agagggggcg aaggggtcag ccctgccctt cagcatcctc
                                                                     1200
agttcctgca gcagagcctg gaagacaccc taatgtggca gctgtctcaa acctccaaaa
                                                                     1260
                                                                     1320
gccctgagtt tcaagtatcc ttgttgacac ggccatgacc actttccccg tgggccatgg
caatttttac acaaacctga aaagatgttg tgtcttgtgt ttttgtctta tttttgttgg
                                                                     1380
agccactetg tteetggete agccteaaat geagtatttt tgttgtgtte tgttgttttt
                                                                     1440
```

atagcagggt	tggggtggtt	tttgagccat	gcgtgggtgg	ggagggaggt	gtttaacggc	1500
actgtggcct	tggtctaact	tttgtgtgaa	ataataaaca	acattgtctg		1550
<210> 167 <211> 158! <212> DNA <213> Home	o sapiens					
<400> 167 acagcagtta	cactgcggcg	ggcgtctgtt	ctagtgtttg	agccgtcgtg	cttcaccggt	60
	agcatgtcgg					120
	tcgcgcgccg					180
	tacgccgagc					240
	accgctgaga					300
gacgcgaatc	atcccccgcc	acctgcagct	ggccatccgc	aacgacgagg	agctcaacaa	360
gctgctgggc	ggcgtgacga	tcgcccaggg	aggcgtcctg	cccaacatcc	aggccgtgct	420
gctgcccaag	aagaccagcg	ccaccgtggg	gccgaaggcg	ccctcgggcg	gcaagaaggc	480
cacccaggcc	tcccaggagt	actaagaggg	cccgcgccgc	ggccggccgc	cccagctccc	540
catgccacca	caaaggccct	tttaagggcc	accaccgccc	tcatggaaag	agctgagccg	600
cttcagactg	cggggcaagc	gggccgcggc	tcccttcccc	tcccctcccc	tegecegeet	660
tegeegeeeg	gcctcgagtc	cccgcccgcc	cccgctcccg	tcccgcaccg	cctgccgcgt	720
cggcctcggg	cctgccctgt	ccgccgtccg	ccctccggta	gggttcgggc	cttccggatg	780
cggcttgggc	gctcttcggg	gacctccgtg	gcgcggaaga	cccgagcctg	ccggggggag	840
gccggcggcg	ccgcacctgc	ccgcctcggc	gttcgtgact	cagccgcccc	atcccgagtc	900
gctaaggggc	tgcggggagg	ccgcagcacc	ttctggaaga	cttggccttc	cgctctgacg	960
cagggccgag	gtgggcagtc	caggccgaga	gccggcggcc	ctgaaggtga	gtgaggccct	1020
cggcagctgc	agccggggtg	tctggtaccc	ccccggcgtg	gtgcttagcc	caggactttc	1080
agacggccgc	tggccgggag	gctttggtgg	gagagacgcg	atcgccgatt	tcggtctggc	1140
gccccttctg	cggccgggac	ccaggccttt	cacatcagct	ctccctccat	cttcattcat	1200
aggtctgcgc	tggggccggg	acgaagcact	tggtaacagg	cacatcttcc	tcccgagtga	1260
ctgcctccta	ggaggacatt	taggggaggg	cagaggcctg	cagtttggct	tcacggctgg	1320
ctatgtggac	agcaagagtc	gttttgcgga	acgcgactgg	cagccaggcc	tgtcgggccc	1380
ccgacgccgc	cccatttccc	ttccagcaaa	ctcaactcgg	caatccaagc	acctagatac	1440
cagcacaagt	cggttaatcc	ctgtctggac	tgagcctccg	ttggcttctg	aactggaatt	1500
ctgcagctaa	cccttccacg	actagaacct	taggcattgg	ggagttttag	atggactaat	1560
tttattaaag	gattgttttt	ttttt				1585
	o sapiens					
<400> 168 agtctccggc	gagttgttgc	ctgggctgga	cgtggttttg	tctgctgcgc	ccgctcttcg	60
cgctctcgtt	tcattttctg	cagcgcgcca	cgaggatggc	ccacaagcag	atctactact	120
cggacaagta	cttcgacgaa	cactacgagt	accggcatgt	tatgttaccc	agagaacttt	180
ccaaacaagt	acctaaaact	catctgatgt	ctgaagagga	gtggaggaga	cttggtgtcc	240
aacagagtct	aggctgggtt	cattacatga	ttcatgagcc	agaaccacat	attcttctct	300
ttagacgacc	tcttccaaaa	gatcaacaaa	aatgaagttt	atctggggat	cgtcaaatct	360
ttttcaaatt	taatgtatat	gtgtatataa	ggtagtattc	agtgaatact	tgagaaatgt	420
acaaatcttt	catccatacc	tgtgcatgag	ctgtattctt	cacagcaaca	gagctcagtt	480
aaatgcaact	gcaagtaggt	tactgtaaga	tgtttaagat	aaaagttctt	ccagtcagtt	540
tttctcttaa	gtgcctgttt	gagtttactg	aaacagttta	cttttgttca	ataaagtttg	600
tatgttgcat	ttaaaaaaaa	aaaaaaa				627

```
169
2161
DNA
Homo sapiens
<400> 169
gggcgatcct gccggagccc cgccgccgcc ggcttggatt ctgaaacctt ccttgtatcc
                                                                        60
ctcctgagac atctttgctg caagatcgag gctgtcctct ggtgagaagg tggtgaggct
                                                                       120
                                                                       180
tecegteata ttecagetet gaacageaae atggggtgea aagteetget caacattggg
cagcagatgc tgcggcggaa ggtggtggac tgtagcccgg aggagacgcg gctgtctcgc
                                                                       240
                                                                       300
tgcctgaaca cttttgatct ggtggccctc ggggtgggca gcacactggg tgctggtgtc
tacgtcctgg ctggagetgt ggcccgtgag aatgcaggcc ctgccattgt catctccttc
                                                                       360
etgategetg egetggeete agtgetgget ggeetgtget atggegagtt tggtgetegg
                                                                       420
gtccccaaga cgggctcagc ttacctctac agctatgtca ccgttggaga gctctgggcc
                                                                       480
ttcatcaccg getggaactt aatcetetee tacatcateg gtacttcaag egtagegagg
                                                                       540
                                                                       600
gcctggagcg ccaccttcga cgagctgata ggcagaccca tcggggagtt ctcacggaca
cacatgactc tgaacgcccc cggcgtgctg gctgaaaacc ccgacatatt cgcagtgatc
                                                                       660
                                                                       720
ataattetea tettgacagg acttttaact ettggtgtga aagagtegge catggteaac
aaaatattca cttgtattaa cgtcctggtc ctgggcttca taatggtgtc aggatttgtg
                                                                       780
                                                                       840
aaaggatcgg ttaaaaactg gcagctcacg gaggaggatt ttggggaacac atcaggccgt
                                                                       900
ctctgtttga acaatgacac aaaagaaggg aagcccggtg ttggtggatt catgcccttc
gggttetetg gtgteetgte gggggeageg acttgettet atgeettegt gggetttgae
                                                                       960
tgcatcgcca ccacaggtga agaggtgaag aacccacaga aggccatccc cgtggggatc
                                                                      1020
gtggcgtccc tcttgatctg cttcatcgcc tactttgggg tgtcggctgc cctcacgctc
                                                                      1080
atgatgccct acttctgcct ggacaataac agccccctgc ccgacgcctt taagcacgtg
                                                                      1140
                                                                      1200
ggctgggaag gtgccaagta cgcagtggcc gtgggctccc tctgtgctct ttccgccagt
                                                                      1260
cttctaggtt ccatgtttcc catgcctcgg gttatctatg ccatggctga ggatggactg
ctatttaaat tcttagccaa cgtcaatgat aggaccaaaa caccaataat cgccacatta
                                                                      1320
                                                                      1380
gcctcgggtg ccgttgctgc tgtgatggcc ttcctctttg acctgaagga cttggtggac
ctcatgtcca ttggcactct cctggcttac tcgttggtgg ctgcctgtgt gttggtctta
                                                                      1440
                                                                      1500
cggtaccage cagagcagcc taacctggta taccagatgg ccagtacttc cgacgagtta
gatccagcag accaaaatga attggcaagc accaatgatt cccagctggg gtttttacca
                                                                      1560
                                                                      1620
gaggcagaga tgttctcttt gaaaaccata ctctcaccca aaaacatgga gccttccaaa
                                                                      1680
atctctgggc taattgtgaa catttcaacc agccttatag ctgttctcat catcaccttc
tgcattgtga ccgtgcttgg aagggaggct ctcaccaaag gggcgctgtg ggcagtcttt
                                                                      1740
ctgctcgcag ggtctgccct cctctgtgcc gtggtcacgg gcgtcatctg gaggcagccc
                                                                      1800
gagagcaaga ccaagctete atttaaggtt ceetteetge cagtgeteee cateetgage
                                                                      1860
                                                                      1920
atcttcgtga acgtctatct catgatgcag ctggaccagg gcacctgggt ccggtttgct
                                                                      1980
gtgtggatgc tgataggctt catcatctac tttggctatg gcctgtggca cagcgaggag
                                                                      2040
gcgtccctgg atgccgacca agcaaggact cctgacggca acttggacca gtgcaagtga
                                                                      2100
cgcacagccc cgcccccgg aggtggcagc agccccgagg gacgccccca gaggaccggg
aggcacccca ccctccccac cagtgcaaca gaaaccacct gcgtccacac cctcactgca
                                                                      2160
                                                                      2161
       170
2824
DNA
Homo sapiens
<400> 170 gcggccgctt tcgatttcgc tttcccctaa atggctgagc ttctcgccag cgcaggatca
                                                                        60
gcctgttcct gggactttcc gagagccccg ccctcgttcc ctcccccagc cgccagtagg
                                                                       120
ggaggactcg gcggtacccg gagcttcagg ccccaccggg gcgcggagag tcccagaccc
                                                                       180
```

240

ggcegggace gggaeggegt cegagtgeca atggetaget etaggtgtee egeteeeege

```
gggtgeeget geeteeegg agettetete geatggetgg ggacagtaet getaettete
                                                                      300
gccgactggg tgctgctccg gaccgcgctg ccccgcatat tctccctgct ggtgcccacc
                                                                      360
                                                                      420
gegetgeeac tgeteegggt etgggeggtg ggeetgagee getgggeegt getetggetg
ggggcctgcg gggtcctcag ggcaacggtt ggctccaaga gcgaaaacgc aggtgcccag
                                                                      480
ggctggctgg ctgctttgaa gccattagct gcggcactgg gcttggccct gccgggactt
                                                                      540
                                                                      600
gccttgttcc gagagctgat ctcatgggga gcccccgggt ccgcggatag caccaggcta
                                                                      660
ctgcactggg gaagtcaccc taccgccttc gttgtcagtt atgcagcggc actgcccgca
gcagccctgt ggcacaaact cgggagcctc tgggtgcccg gcggtcaggg cggctctgga
                                                                      720
aaccctgtgc gtcggcttct aggctgcctg ggctcggaga cgcgccgcct ctcgctgttc
                                                                      780
                                                                      840
ctggtcctgg tggtcctctc ctctcttggg gagatggcca ttccattctt tacgggccgc
                                                                      900
ctcactgact ggattctaca agatggctca gccgatacct tcactcgaaa cttaactctc
atgtccattc tcaccatagc cagtgcagtg ctggagttcg tgggtgacgg gatctataac
                                                                      960
aacaccatgg gecaegtgea eagecaettg cagggagagg tgtttgggge tgteetgege
                                                                     1020
caggagacgg agtttttcca acagaaccag acaggtaaca tcatgtctcg ggtaacagag
                                                                     1080
                                                                     1140
gacacgtcca ccctgagtga ttctctgagt gagaatctga gcttatttct gtggtacctg
gtgcgaggcc tatgtctctt ggggatcatg ctctggggat cagtgtccct caccatggtc
                                                                     1200
accetgatea ceetgeetet getttteett etgeecaaga aggtgggaaa atggtaceag
                                                                     1260
                                                                     1320
ttgctggaag tgcaggtgcg ggaatctctg gcaaagtcca gccaggtggc cattgaggct
ctgtcggcca tgcctacagt tcgaagcttt gccaacgagg agggcgaagc ccagaagttt
                                                                     1380
agggaaaagc tgcaagaaat aaagacactc aaccagaagg aggctgtggc ctatgcagtc
                                                                     1440
aacteetgga eeactagtat tteaggtatg etgetgaaag tgggaateet etacattggt
                                                                     1500
                                                                     1560
gggcagctgg tgaccagtgg ggctgtaagc agtgggaacc ttgtcacatt tgttctctac
cagatgcagt tcacccaggc tgtggaggta ctgctctcca tctaccccag agtacagaag
                                                                     1620
                                                                     1680
gctgtgggct cctcagagaa aatatttgag tacctggacc gcacccctcg ctgcccaccc
agtggtctgt tgactccctt acacttggag ggccttgtcc agttccaaga tgtctccttt
                                                                     1740
                                                                     1800
gcctacccaa accgcccaga tgtcttagtg ctacaggggc tgacattcac cctacgccct
ggcgaggtga cggcgctggt gggacccaat gggtctggga agagcacagt ggctgccctg
                                                                     1860
ctgcagaatc tgtaccagcc caccggggga cagctgctgt tggatgggaa gccccttccc
                                                                     1920
                                                                     1980
caatatgagc accgctacct gcacaggcag gtggctgcag tgggacaaga gccacaggta
                                                                     2040
tttggaagaa gtcttcaaga aaatattgcc tatggcctga cccagaagcc aactatggag
                                                                     2100
gaaatcacag ctgctgcagt aaagtctggg gcccatagtt tcatctctgg actccctcag
ggctatgaca cagaggtaga cgaggctggg agccagctgt cagggggtca gcgacaggca
                                                                     2160
                                                                     2220
gtggcgttgg cccgagcatt gatccggaaa ccgtgtgtac ttatcctgga tgatgccacc
                                                                     2280
agtgccctgg atgcaaacag ccagttacag gtggagcagc tcctgtacga aagccctgag
eggtaeteee geteagtget teteateace eageacetea geetggtgga geaggetgae
                                                                     2340
cacatcetet ttetggaagg aggegetate egggaggggg gaacceacea geageteatg
                                                                     2400
gagaaaaagg ggtgctactg ggccatggtg caggctcctg cagatgctcc agaatgaaag
                                                                     2460
cetteteaga cetgegeact ceatetecet ceettttett etetetgtgg tggagaacea
                                                                     2520
                                                                     2580
cagctgcaga gtagcagctg cctccaggat gagttacttg aaatttgcct tgagtgtgtt
                                                                     2640
acctcctttc caageteete gtgataatge agaetteetg gagtacaaac acaggatttg
                                                                     2700
taattcctac tgtaacggag tttagagcca gggctgatgc tttggtgtgg ccagcactct
                                                                     2760
gaaactgaga aatgttcaga atgtacggaa agatgatcag ctattttcaa cataactgaa
                                                                     2820
ggcatatgct ggcccataaa caccctgtag gttcttgata tttataataa aattggtgtt
ttgt
                                                                     2824
```

<210> 171 <211> 2247 <212> DNA <213> Homo sapiens <400> 171

```
ccggggcgga tggctccggc cgcctggctc cgcagcgcgg ccgcgcgcgc cctcctgccc
                                                                       60
                                                                      120
ccgatgctgc tgctgctgct ccagccgccg ccgctgctgg cccgggctct gccgccggac
gtccaccacc tccatgccga gaggagggg ccacagccct ggcatgcagc cctgcccagt
                                                                      180
agcccggcac ctgcccctgc cacgcaggaa gccccccggc ctgccagcag cctcaggcct
                                                                      240
ccccgctgtg gcgtgcccga cccatctgat gggctgagtg cccgcaaccg acagaagagg
                                                                      300
                                                                      360
ttcgtgcttt ctggcgggcg ctgggagaag acggacctca cctacaggat ccttcggttc
ccatggcagt tggtgcagga gcaggtgcgg cagacgatgg cagaggccct aaaggtatgg
                                                                      420
                                                                      480
agcgatgtga cgccactcac ctttactgag gtgcacgagg gccgtgctga catcatgatc
gacttcgcca ggtactggca tggggacgac ctgccgtttg atgggcctgg gggcatcctg
                                                                      540
                                                                      600
gcccatgcct tcttccccaa gactcaccga gaaggggatg tccacttcga ctatgatgag
acctggacta tcggggatga ccagggcaca gacctgctgc aggtggcagc ccatgaattt
                                                                      660
ggccaegtge tggggetgea geacaeaaca geagecaagg eeetgatgte egeettetae
                                                                      720
                                                                      780
acctttcgct acccactgag tctcagccca gatgactgca ggggcgttca acacctatat
ggccagccet ggcccactgt cacctccagg accccagccc tgggccccca ggctgggata
                                                                      840
                                                                      900
qacaccaatg agattgcacc gctggagcca gacgccccgc cagatgcctg tgaggcctcc
tttgacgcgg tctccaccat ccgaggcgag ctctttttct tcaaagcggg ctttgtgtgg
                                                                      960
                                                                     1020
egecteegtg ggggeeaget geageeegge tacceageat tggceteteg ceaetggeag
                                                                      1080
ggactgccca gccctgtgga cgctgccttc gaggatgccc agggccacat ttggttcttc
caaggtgctc agtactgggt gtacgacggt gaaaagccag tcctgggccc cgcaccctc
                                                                      1140
accgagetgg geetggtgag gtteceggte catgetgeet tggtetgggg tecegagaag
                                                                      1200
                                                                      1260
aacaagatet aettetteeg aggeagggae taetggegtt teeaceecag eacceggegt
                                                                     1320
gtagacagtc ccgtgccccg cagggccact gactggagag gggtgccctc tgagatcgac
                                                                     1380
getgeettee aggatgetga tggetatgee tactteetge geggeegeet etactggaag
                                                                     1440
tttgaccctg tgaaggtgaa ggctctggaa ggcttccccc gtctcgtggg tcctgacttc
tttggctgtg ccgagcctgc caacactttc ctctgaccat ggcttggatg ccctcagggg
                                                                     1500
                                                                     1560
tgctgacccc tgccaggcca cgaatatcag gctagagacc catggccatc tttgtggctg
tgggcaccag gcatgggact gagcccatgt ctcctgcagg gggatggggt ggggtacaac
                                                                     1620
                                                                      1680
caccatgaca actgeoggga gggccacgca ggtcgtggtc acctgccagc gactgtctca
                                                                      1740
gactgggcag ggaggctttg gcatgactta agaggaaggg cagtcttggg acccgctatg
                                                                      1800
caggicetgg caaacetgge tgeeetgtet catecetgte ceteagggta geaceatgge
                                                                      1860
aggactgggg gaactggagt gtccttgctg tatccctgtt gtgaggttcc ttccaggggc
tggcactgaa gcaagggtgc tggggcccca tggccttcag ccctggctga gcaactgggc
                                                                     1920
                                                                     1980
tgtagggcag ggccacttcc tgaggtcagg tcttggtagg tgcctgcatc tgtctgcctt
                                                                     2040
ctggctgaca atcctggaaa tctgttctcc agaatccagg ccaaaaaagtt cacagtcaaa
                                                                      2100
tggggagggg tattcttcat gcaggagacc ccaggccctg gaggctgcaa catacctcaa
                                                                     2160
tectgtecea ggeeggatee teetgaagee ettttegeag eactgetate etecaaagee
attgtaaatg tgtgtacagt gtgtataaac cttcttcttc ttttttttt ttaaactgag
                                                                      2220
                                                                      2247
gattgtcatt aaacacagtt gttttct
       172
5434
DNA
Homo sapiens
^{<\!400>} 172 cgtccgcgtg gggggggtgt gtgcccgcct tgcgcatgcg tgttccctgg gcatggccgg
                                                                        60
ctccgttcca tccttctgca cagggtatcg cctctctccg tttggtacat cccctcctcc
                                                                       120
cccacgcccg gactggggtg gtagacgcgc ctccgctcat cgcccctccc catcggtttc
                                                                       180
                                                                       240
cgcgcgaaaa gccggggcgc ctgcgctgcc gccgccgcgt ctgctgaagc ctccgagatg
ceggegegta cegecceage cegggtgeec acaetggeeg teeeggeeat etegetgeec
                                                                       300
gacgatgtcc gcaggcggct caaagatttg gaaagagaca gcttaacaga aaaggaatgt
                                                                       360
```

gtgaaggaga	aattgaatct	cttgcacgaa	tttctgcaaa	cagaaataaa	gaatcagtta	420
tgtgacttgg	aaaccaaatt	acgtaaagaa	gaattatccg	aggagggcta	cctggctaaa	480
gtcaaatccc	ttttaaataa	agatttgtcc	ttggagaacg	gtgctcatgc	ttacaaccgg	540
gaagtgaatg	gacgtctaga	aaacgggaac	caagcaagaa	gtgaagcccg	tagagtggga	600
atggcagatg	ccaacagccc	ccccaaaccc	ctttccaaac	ctcgcacgcc	caggaggagc	660
aagtccgatg	gagaggctaa	gcctgaacct	tcacctagcc	ccaggattac	aaggaaaagc	720
accaggcaaa	ccaccatcac	atctcatttt	gcaaagggcc	ctgccaaacg	gaaacctcag	780
gaagagtctg	aaagagccaa	atcggatgag	tccatcaagg	aagaagacaa	agaccaggat	840
gagaagagac	gtagagttac	atccagagaa	cgagttgcta	gaccgcttcc	tgcagaagaa	900
cctgaaagag	caaaatcagg	aacgcgcact	gaaaaggaag	aagaaagaga	tgaaaaagaa	960
gaaaagagac	tccgaagtca	aaccaaagaa	ccaacaccca	aacagaaact	gaaggaggag	1020
ccggacagag	aagccagggc	aggcgtgcag	gctgacgagg	acgaagatgg	agacgagaaa	1080
gatgagaaga	agcacagaag	tcaacccaaa	gatctagctg	ccaaacggag	gcccgaagaa	1140
aaagaacctg	aaaaagtaaa	tccacagatt	tctgatgaaa	aagacgagga	tgaaaaggag	1200
gagaagagac	gcaaaacgac	ccccaaagaa	ccaacggaga	aaaaaatggc	tcgcgccaaa	1260
acagtcatga	actccaagac	ccaccctccc	aagtgcattc	agtgcgggca	gtacctggac	1320
gaccctgacc	tcaaatatgg	gcagcaccca	ccagacgcgg	tggatgagcc	acagatgctg	1380
acaaatgaga	agctgtccat	ctttgatgcc	aacgagtctg	gctttgagag	ttatgaggcg	1440
cttccccagc	acaaactgac	ctgcttcagt	gtgtactgta	agcacggtca	cctgtgtccc	1500
atcgacaccg	gcctcatcga	gaagaatatc	gaactcttct	tttctggttc	agcaaaacca	1560
atctatgatg	atgacccgtc	tcttgaaggt	ggtgttaatg	gcaaaaatct	tggccccata	1620
aatgaatggt	ggatcactgg	ctttgatgga	ggtgaaaagg	ccctcatcgg	cttcagcacc	1680
tcatttgccg	aatacattct	gatggatccc	agtcccgagt	atgcgcccat	atttgggctg	1740
atgcaggaga	agatctacat	cagcaagatt	gtggtggagt	tcctgcagag	caattccgac	1800
tcgacctatg	aggacctgat	caacaagatc	gagaccacgg	ttcctccttc	tggcctcaac	1860
ttgaaccgct	tcacagagga	ctccctcctg	cgacacgcgc	agtttgtggt	ggagcaggtg	1920
gagagttatg	acgaggccgg	ggacagtgat	gagcagccca	tcttcctgac	gccctgcatg	1980
cgggacctga	tcaagctggc	tggggtcacg	ctgggacaga	ggcgagccca	ggcgaggcgg	2040
cagaccatca	ggcattctac	cagggagaag	gacaggggac	ccacgaaagc	caccaccacc	2100
aagctggtct	accagatctt	cgatactttc	ttcgcagagc	aaattgaaaa	ggatgacaga	2160
gaagacaagg	agaacgcctt	taagcgccgg	cgatgtggcg	tctgtgaggt	gtgtcagcag	2220
cctgagtgtg	ggaaatgtaa	agcctgcaag	gacatggtta	aatttggtgg	cagtggacgg	2280
agcaagcagg	cttgccaaga	gcggaggtgt	cccaatatgg	ccatgaagga	ggcagatgac	2340
gatgaggaag	tcgatgataa	catcccagag	atgccgtcac	ccaaaaaaat	gcaccagggg	2400
aagaagaaga	aacagaacaa	gaatcgcatc	tcttgggtcg	gagaagccgt	caagactgat	2460
gggaagaaga	gttactataa	gaaggtgtgc	attgatgcgg	aaaccctgga	agtgggggac	2520
tgtgtctctg	ttattccaga	tgattcctca	aaaccgctgt	atctagcaag	ggtcacggcg	2580
ctgtgggagg	acagcagcaa	cgggcagatg	tttcacgccc	actggttctg	cgctgggaca	2640
gacacagtcc	tcggggccac	gtcggaccct	ctggagctgt	tcttggtgga	tgaatgtgag	2700
gacatgcagc	tttcatatat	ccacagcaaa	gtgaaagtca	tctacaaagc	cccctccgaa	2760
aactgggcca	tggagggagg	catggatccc	gagtccctgc	tggaggggga	cgacgggaag	2820
	accagctgtg					2880
acccagccaa	cagaggacaa	caagttcaaa	ttctgtgtga	gctgtgcccg	tctggctgag	2940
	aagaaatccc					3000
ctctactact	cagccaccaa	gaacggcatc	ctgtaccgag	ttggtgatgg	tgtgtacctg	3060
ccccctgagg	ccttcacgtt	caacatcaag	ctgtccagtc	ccgtgaaacg	cccacggaag	3120
	atgaggacct					3180
ggcagcaacc	tggatgcccc	tgagccctac	cgaattggcc	ggatcaaaga	gatcttctgt	3240

```
cccaagaaga gcaacggcag gcccaatgag actgacatca aaatccgggt caacaagttc
                                                                    3300
                                                                    3360
tacaggeetg agaacaceca caagteeact ceagegaget accaegeaga cateaacetg
ctctactgga gcgacgagga ggccgtggtg gacttcaagg ctgtgcaggg ccgctgcacc
                                                                    3420
                                                                    3480
gtggagtatg gggaggacct gcccgagtgc gtccaggtgt actccatggg cggccccaac
cgcttctact tcctcgaggc ctataatgca aagagcaaaa gctttgaaga tcctcccaac
                                                                    3540
                                                                    3600
teccaageet gtgageegag egageeagag atagagatea agetgeecaa getgeggaee
                                                                    3660
                                                                    3720
ctggatgtgt tttctggctg cggggggttg tcggagggat tccaccaagc aggcatctct
gacacgetgt gggccatega gatgtgggac cetgeggeee aggegtteeg getgaacaac
                                                                    3780
cccggctcca cagtgttcac agaggactgc aacatcctgc tgaagctggt catggctggg
                                                                    3840
gagaccacca actcccgcgg ccagcggctg ccccagaagg gagacgtgga gatgctgtgc
                                                                    3900
ggegggeege cetgeeaggg etteagegge atgaaceget teaattegeg cacetactee
                                                                    3960
                                                                    4020
aagttcaaaa actctctggt ggtttccttc ctcagctact gcgactacta ccggccccgg
ttetteetee tggagaatgt eaggaacttt gteteettea agegeteeat ggteetgaag
                                                                    4080
                                                                    4140
ctcaccctcc gctgcctggt ccgcatgggc tatcagtgca ccttcggcgt gctgcaggcc
ggtcagtacg gcgtggccca gactaggagg cgggccatca tcctggccgc ggcccctgga
                                                                    4200
gagaagetee etetgtteee ggageeactg caegtgtttg eteceeggge etgeeagetg
                                                                    4260
                                                                    4320
agcgtggtgg tggatgacaa gaagtttgtg agcaacataa ccaggttgag ctcgggtcct
ttccggacca tcacggtgcg agacacgatg tccgacctgc cggaggtgcg gaatggagcc
                                                                    4380
                                                                    4440
teggeactgg agateteeta caaeggggag ceteagteet ggtteeagag geageteegg
ggcgcacagt accagcccat cctcagggac cacatctgta aggacatgag tgcattggtg
                                                                    4500
getgeeegea tgeggeacat eccettggee ecagggteag aetggegega tetgeeeaac
                                                                    4560
ategaggtge ggeteteaga eggeaceatg geeaggaage tgeggtatae eeaceatgae
                                                                    4620
                                                                    4680
aggaagaacg gccgcagcag ctctggggcc ctccgtgggg tctgctcctg cgtggaagcc
                                                                    4740
ggcaaagcct gcgaccccgc agccaggcag ttcaacaccc tcatcccctg gtgcctgccc
cacaccggga accggcacaa ccactgggct ggcctctatg gaaggctcga gtgggacggc
                                                                    4800
                                                                    4860
ttcttcagca caaccgtcac caaccccgag cccatgggca agcagggccg cgtgctccac
ccagagcagc acceptgtggt gagcgtgcgg gagtgtgccc gctcccaggg cttccctgac
                                                                    4920
acctaccggc tcttcggcaa catcctggac aagcaccggc aggtgggcaa tgccgtgcca
                                                                    4980
                                                                    5040
ccgcccctgg ccaaagccat tggcttggag atcaagcttt gtatgttggc caaagcccga
gagagtgcct cagctaaaat aaaggaggag gaagctgcta aggactagtt ctgccctccc
                                                                    5100
gtcacccctg tttctggcac caggaatccc caacatgcac tgatgttgtg tttttaacat
                                                                    5160
                                                                    5220
gtcaatctgt ccgttcacat gtgtggtaca tggtgtttgt ggccttggct gacatgaagc
tgttgtgtga ggttcgctta tcaactaatg atttagtgat caaattgtgc agtactttgt
                                                                    5280
gcattctgga ttttaaaagt tttttattat gcattatatc aaatctacca ctgtatgagt
                                                                    5340
ggaaattaag actttatgta gtttttatat gttgtaatat ttcttcaaat aaatctctcc
                                                                    5400
                                                                    5434
tataaaccaa aaaaaaaaaa aaaaaaaaaa aaaa
      173
1817
DNA
Homo sapiens
<400> 173
ctgtcagaat ggccaccatg gtaccatcg tgttgtggcc cagggcctgc tggactctgc
                                                                      60
tggtctgctg tctgctgacc ccaggtgtcc aggggcagga gttccttttg cgggtggagc
                                                                     120
cccagaaccc tgtgctctct gctggagggt ccctgtttgt gaactgcagt actgattgtc
                                                                     180
ccagctctga gaaaatcgcc ttggagacgt ccctatcaaa ggagctggtg gccagtggca
                                                                     240
                                                                     300
tgggetgggc agcetteaat eteageaacg tgaetggeaa cagteggate etetgeteag
tgtactgcaa tggctcccag ataacaggct cctctaacat caccgtgtac gggctcccgg
                                                                     360
agcgtgtgga gctggcaccc ctgcctcctt ggcagccggt gggccagaac ttcaccctgc
                                                                     420
```

```
gctgccaagt ggagggtggg tcgcccgga ccagcctcac ggtggtgctg cttcgctggg
                                                                     480
aggaggaget gageeggeag eeegeagtgg aggageeage ggaggteaet geeactgtge
                                                                     540
tggccagcag agacgaccac ggagcccctt tctcatgccg cacagaactg gacatgcagc
                                                                     600
                                                                     660
cccagggget gggactgttc gtgaacacct cagcccccg ccagctccga acctttgtcc
                                                                     720
tgcccgtgac cccccgcgc ctcgtggccc cccggttctt ggaggtggaa acgtcgtggc
                                                                     780
cggtggactg caccctagac gggctttttc cagcctcaga ggcccaggtc tacctggcgc
                                                                     840
tgggggacca gatgetgaat gegacagtca tgaaccacgg ggacacgeta acggecacag
ccacagecac ggcgcgcgcg gatcaggagg gtgcccggga gatcgtctgc aacgtgaccc
                                                                     900
tagggggcga gagacgggag gcccgggaga acttgacggt ctttagcttc ctaggaccca
                                                                     960
                                                                    1020
ttqtqaacct caqcqaqccc accgcccatg aggggtccac agtgaccgtg agttgcatgg
ctggggctcg agtccaggtc acgctggacg gagttccggc cgcggccccg gggcagccag
                                                                    1080
ctcaacttca gctaaatgct accgagagtg acgacggacg cagcttcttc tgcagtgcca
                                                                    1140
ctctcgaggt ggacggcgag ttcttgcaca ggaacagtag cgtccagctg cgagtcctgt
                                                                    1200
                                                                    1260
atggtcccaa aattgaccga gccacatgcc cccagcactt gaaatggaaa gataaaacga
gacacgtect geagtgecaa gecaggggea accegtacee egagetgegg tgtttgaagg
                                                                    1320
                                                                    1380
aaggetecag eegggaggtg eeggtgggga teeegttett egteaaegta acacataatg
                                                                    1440
gtacttatca gtgccaagcg tccagctcac gaggcaaata caccctggtc gtggtgatgg
                                                                    1500
acattgagge tgggagetee eactttgtee eegtettegt ggeggtgtta etgaceetgg
                                                                    1560
gegtggtgae tategtaetg geettaatgt aegtetteag ggageaceaa eggageggea
gttaccatgt tagggaggag agcacctatc tgcccctcac gtctatgcag ccgacagaag
                                                                    1620
                                                                    1680
caatggggga agaaccgtcc agagctgagt gacgctggga tccgggatca aagttggcgg
gggcttggct gtgccctcag attccgcacc aataaagcct tcaaactccc taaaaaaaa
                                                                    1740
                                                                    1800
1817
aaaaaaaaa aaaaaaa
      174
2545
DNA
Homo sapiens
<400> 174 atccaataca ggagtgactt ggaactccat tctatcacta tgaagaaaag tggtgttctt
                                                                      60
ttcctcttgg gcatcatctt gctggttctg attggagtgc aaggaacccc agtagtgaga
                                                                     120
aagggtcgct gttcctgcat cagcaccaac caagggacta tccacctaca atccttgaaa
                                                                     180
                                                                     240
gaccttaaac aatttgcccc aagcccttcc tgcgagaaaa ttgaaatcat tgctacactg
aagaatggag ttcaaacatg tctaaaccca gattcagcag atgtgaagga actgattaaa
                                                                     300
                                                                     360
aagtgggaga aacaggtcag ccaaaagaaa aagcaaaaga atgggaaaaa acatcaaaaa
aagaaagttc tgaaagttcg aaaatctcaa cgttctcgtc aaaagaagac tacataagag
                                                                     420
accacttcac caataagtat tctgtgttaa aaatgttcta ttttaattat accgctatca
                                                                     480
                                                                     540
ttccaaagga ggatggcata taatacaaag gcttattaat ttgactagaa aatttaaaac
attactctga aattgtaact aaagttagaa agttgatttt aagaatccaa acgttaagaa
                                                                     600
ttgttaaagg ctatgattgt ctttgttctt ctaccaccca ccagttgaat ttcatcatgc
                                                                     660
ttaaggccat gattttagca atacccatgt ctacacagat gttcacccaa ccacatccca
                                                                     720
                                                                     780
ctcacaacag ctgcctggaa gagcagccct aggcttccac gtactgcagc ctccagagag
tatctgaggc acatgtcagc aagtcctaag cctgttagca tgctggtgag ccaagcagtt
                                                                     840
                                                                     900
tgaaattgag ctggacctca ccaagctgct gtggccatca acctctgtat ttgaatcagc
                                                                     960
ctacaggcct cacacacaat gtgtctgaga gattcatgct gattgttatt gggtatcacc
actggagatc accagtgtgt ggctttcaga gcctcctttc tggctttgga agccatgtga
                                                                    1020
                                                                    1080
ttccatcttg cccgctcagg ctgaccactt tatttctttt tgttcccctt tgcttcattc
aagtcagete ttetecatee taccacaatg cagtgeettt etteteteca gtgcacetgt
                                                                    1140
catatgetet gatttatetg agteaactee ttteteatet tgteeceaac accecacaga
                                                                    1200
```

```
agtgctttct tctcccaatt catcctcact cagtccagct tagttcaagt cctgcctctt
                                                                     1260
aaataaacct ttttggacac acaaattatc ttaaaactcc tgtttcactt ggttcagtac
                                                                     1320
                                                                     1380
cacatgggtg aacactcaat ggttaactaa ttcttgggtg tttatcctat ctctccaacc
agattgtcag ctccttgagg gcaagagcca cagtatattt ccctgtttct tccacagtgc
                                                                     1440
                                                                     1500
ctaataatac tgtggaacta ggttttaata attttttaat tgatgttgtt atgggcagga
tggcaaccag accattgtct cagagcaggt gctggctctt tcctggctac tccatgttgg
                                                                     1560
                                                                     1620
ctagcctctg gtaacctctt acttattatc ttcaggacac tcactacagg gaccagggat
                                                                     1680
gatgcaacat ccttgtcttt ttatgacagg atgtttgctc agcttctcca acaataagaa
gcacgtggta aaacacttgc ggatattctg gactgttttt aaaaaatata cagtttaccg
                                                                     1740
aaaatcatat aatcttacaa tgaaaaggac tttatagatc agccagtgac caaccttttc
                                                                     1800
                                                                     1860
ccaaccatac aaaaattcct tttcccgaag gaaaagggct ttctcaataa gcctcagctt
                                                                     1920
tctaagatct aacaagatag ccaccgagat ccttatcgaa actcatttta ggcaaatatg
                                                                     1980
agttttattg tccgtttact tgtttcagag tttgtattgt gattatcaat taccacca
                                                                     2040
tctcccatga agaaagggaa cggtgaagta ctaagcgcta gaggaagcag ccaagtcggt
                                                                     2100
tagtggaagc atgattggtg cccagttagc ctctgcagga tgtggaaacc tccttccagg
                                                                     2160
ggaggttcag tgaattgtgt aggagaggtt gtctgtggcc agaatttaaa cctatactca
ctttcccaaa ttgaatcact gctcacactg ctgatgattt agagtgctgt ccggtggaga
                                                                     2220
                                                                     2280
teccaecega aegtettate taateatgaa aetecetagt teetteatgt aaetteeetg
                                                                     2340
aaaaatctaa gtgtttcata aatttgagag tctgtgaccc acttaccttg catctcacag
gtagacagta tataactaac aaccaaagac tacatattgt cactgacaca cacgttataa
                                                                      2400
tcatttatca tatatataca tacatgcata cactctcaaa gcaaataatt tttcacttca
                                                                      2460
aaacagtatt gacttgtata ccttgtaatt tgaaatattt tctttgttaa aatagaatgg
                                                                      2520
                                                                      2545
tatcaataaa tagaccatta atcag
       175
15000
DNA
Homo sapiens
^{<\!400>} 175 ctgagatcac accactgcat taccagcctg ggcgacagag caagactctg tctcaaaaac
                                                                        60
                                                                      120
aaaatacaca cacaacaata taatagtatt tgtttgtttg tttgtttttg agatgcctcg
gattacagtg cggggattac agacgtgagc catcaagccc ggacaatatt attatattgt
                                                                      180
                                                                      240
tcattgcact cccacaacac ccctaagggg caggaacttt tcttcccagc cccctccccc
cgaccccacc gagagacagg gtctcgctct gtcgcccagg cctggagtgc attggcgcga
                                                                      300
                                                                      360
tcaaagctca ctacagctca gaccetctgg cetcaagcga teetceagce tgggeeteec
aaagegetag gattacagge gtgggecace gegeetgace agtettetet tettgeaget
                                                                      420
gagcettaag ageetgteea aagageagag gtgggetgaa ggeacaaage gaatgaaaga
                                                                       480
ataggecece gggcacegtt geaegececa ceteeteeca ggggegttge actecagece
                                                                      540
ctcccgcaca tgcgcactgg gccttccacc gcccccgcc cccagcaaag ccccccgctc
                                                                       600
ggagcatgcg cgggccgctt ggcgccaatt gctgaccgcc acagccacag ccagggctag
                                                                       660
                                                                      720
cctegeeggt teeegggtgg egegetteg etgeeteete ageteeagga tgateggeea
                                                                      780
gaagacgctc tactcctttt tctcccccag ccccgccagg aagcgacacg ccccagccc
                                                                      840
cgagccggcc gtccagggga ccggcgtggc tggggtgcct gaggaaagcg gagatgcggc
                                                                      900
ggtgaggcgc ggcttgggcc ggggctaggg ggtgaagggg gaggaaggcg gtgggccccg
                                                                      960
cctgacggag ggcgtgcagg atcgcgcctc tgactcggta aacccgggct ccgctttcca
aatagcctcc acgtgttcaa aatagccgcc gctgtccccc atgggccgcc atgctaaagg
                                                                      1020
                                                                      1080
gccagccaat gggaacgcgt ctcggggccc atggcgccaa tccgcgcgcc gcaggccctc
                                                                      1140
ctggctcggt gcgctgtcca atcagagggg agagggggg ggacccagag ggaggttttt
                                                                      1200
tgccgcgaaa agaccacgtg gggacgcggt ggggcgggtc tggcgggggc ggggcacctc
                                                                      1260
tgtgcagggt tcccagtcac cgcgacgctc ctcgggaagc catagggcgc ctcccagccc
```

gtctccccgc	tccagtttag	aacctaattc	ccaattcccg	gaccgggccc	agccctgggc	1320
tcttactgtc	cgcttttgct	gggacctgtt	ccacaaatgg	gcgtcttctg	ccttgggccg	1380
tgggggttgg	gccggaagct	gcggacgcct	gggaaggggc	cgctgcagct	cttgagccgc	1440
ctctqcqqqq	accacttgca	ggccatccca	gccaagaagg	ccccggctgg	gcaggaggag	1500
	cgccctcctc					1560
	ccctgctcag					1620
	acctcagcgg					1680
	cataagggta					1740
						1800
	catgtttccg					
	aagaaagcca					1860
	gagatgatat					1920
	gtaaaatcac					1980
cgagaggagt	ggcactgtca	ggacccagcc	cagagaaaga	ggcaaggaat	tgacctgatt	2040
gaaccactta	ggtgggggg	caggcactgt	ttttgtttgt	tgttttttaa	aagaatttgg	2100
acataacatg	acaaagaact	aatgatgttc	caaataactt	gcactagaag	ctttctaatt	2160
gaattcttat	ggtttccaat	gagcaatctg	attttaagtc	tagtttatct	ttaaatcagc	2220
taatgggatt	tgttgcagaa	gaaagaaagc	attacactgt	ttatccaccc	ccacaccaag	2280
	gacccagatg					2340
_	aaggagtcaa					2400
	agtagtaaat					2460
	ctctttttaa					2520
	gtgctcttat					2580
_	ttatggtggt					2640
	tagtcaaccc					2700
	-					2760
	cttctggcct					2820
	tataacagtt					
	gcacggtggc					2880
	gaggtcagga					2940
	gcatggtggc					3000
	gagcccagga					3060
	gacagagcca					3120
tgttgaacta	tgaaagcaga	gcaaccctct	ttaaataggg	ccacgtccta	cctctcagcc	3180
ttacctccac	ctcccactct	cccactccag	agttggacag	tgtggcaaac	ccctccccac	3240
ttctgtctct	taaaaatcaa	gtagatgcct	ctgtggcacc	tccttgaatt	gaagtccgtt	3300
gcctgccacc	tctgtgatcc	agttttcctc	tgagctgcta	cgatgcattt	agcacctgct	3360
gacactggac	ttttaggttt	cttacccgtt	ttcctcccc	gttttgtaaa	ctggggcaag	3420
aatcttgtga	tttaatgaat	atctgtgaaa	tgacatagaa	gtgaaatagg	tgaataaatc	3480
atcttgataa	ggcagccaca	cctaatactt	agaaaatctc	gtaagcttaa	ttttagagta	3540
agaatttaga	atctagctct	ttggttttga	agctaaatta	aatcctatta	agatcaatac	3600
	cttgtttgaa					3660
	aatattgtga					3720
	agggcttctt					3780
	tgtgaacacc					3840
	gagctggatt					3900
	gcagaagctt					3960
						4020
	tatgtttcaa					4020
Ligocaceta	ctcccatggc	Collingate	Lyaccicatt	cicitotyge	cccaccigut	±000

agaggatata	ggggagcaga	caccctcata	tgctgctggt	gggaaatctg	aattgctttt	4140
tttttttt	tttttttt	gagatggagt	gcagtggtgc	aatctcggct	tactgcaacc	4200
tccaccccct	gggttcaagc	gattctcctg	cctcagcctc	ccgagtagct	gggactacag	4260
gtgtgcgcca	ccacacccag	ctaatttttg	tttttttagt	agagatgggg	tttcaccatg	4320
ttggccagat	ggtttcgata	tcttgacctc	gtgatctgcc	tacctcgccc	tcccaaagtg	4380
ctgggattac	aggcgtgagc	caccatgcca	ggccctaaat	tgctttaatt	catcgaaaag	4440
taactggggg	ctaggcacag	tggctcatgc	ctgtaatccc	agcattttgg	gaggccgagg	4500
agggaggatc	ccttgatctc	aggaatttga	gaccagcctc	agcaacataa	gggaggccgt	4560
gtgtctacaa	aaagtaaaaa	aaaaattagg	tgggcatagt	ggtgcactcc	tgtgggccca	4620
	aggctcaggt					4680
gctgtgatgg	caccactgca	catcagcctg	agcaacacag	caaacccgtg	tctcaaaaaa	4740
ttaaaaaagc	agctaggtac	atatctttac	aagtttaaaa	tacgcttagc	ctttgaccag	4800
caactctgtt	attagcaatc	tatgccatag	aagtgtttta	tttgttttgt	ttatgtttgt	4860
	gtctgtgctg					4920
	aggttgtcat					4980
	ttagtgttca					5040
	gtccagacat					5100
	cactgttcac					5160
	gagtcattct					5220
	catccctggc					5280
	gtgcagacat					5340
	ctttgggccg					5400
	gagaatcgct					5460
	ctagcctggg					5520
	atttggtgta					5580
agcaacagtg	ggggtctggg	ttgtaactgc	tgggttgatt	tacttaggtt	ttccagagtg	5640
ctgttaaatc	caagtacaga	ctaaagtaaa	ggtctttggc	agagtcacct	gttagaagga	5700
ggactggcag	tgttgatctc	attaatcggc	gccatatgtg	ccagtgtccc	ttccaagggc	5760
tggctgtaac	ttctaacctt	ttcacatatg	tcttagacgt	tactgagctt	tcaaaattat	5820
gcttaagatt	ctgttttttg	tttttcttgt	ggcttgcttt	cagtttggag	aacatttata	5880
aagagttgtc	tacagacata	gaggattttg	ttcatcctgg	ccatggagat	ttatctgggt	5940
gggccaagca	aggtaagcca	gcgactgcta	gattttttt	tttttttt	ttgagaccga	6000
gtctcactct	gttgcccagg	ctagagtgca	gtggtgcaat	ctcagcttac	tgcaacctct	6060
	ttcaggcgat					6120
tgagccacca	tagctggcta	attttttaat	gtatttttag	tagagacagg	gtttcaccat	6180
gttggccagg	ctggtctcga	actcctgacc	tcaggtgatc	cgcccgactc	ggcttcccaa	6240
agtgctggga	ttacaggcat	aagccaccac	gcccagcccc	gactccattg	ttgatggtag	6300
tggctgctgc	cattatgccg	gctgcagcag	ggaagcacag	cttgctacac	tggatcccat	6360
caagcattgg	tttcatcatg	gatttagccc	ctgttgctgg	gtattgggct	gatttgcctg	6420
agcctacatt	taacctgttt	ctctcatgtg	tataggtgtt	ctccttctca	acgctgtcct	6480
cacggttcgt	gcccatcaag	ccaactctca	taaggagcga	ggctgggagc	agttcactga	6540
tgcagttgtg	tcctggctaa	atcagaactc	gaatggcctt	gttttcttgc	tctggggctc	6600
	aagaagggca					6660
tcttttttt	ttaacactat	aaaaacaatg	taaagaattc	taggagtccc	tgctgtgttt	6720
ggtcctggaa	aatccatgtt	ataaaataac	ttttatttc	ccttaggcct	gttataaggg	6780
tttcccattg	aaaactgaga	agaatttgga	caaattatag	gggtgatgag	ttgtgtatga	6840
ggaaagcaaa	gcaactggcc	aacttgtgac	tgaatgcagt	tggtgctgta	ggcatgaact	6900
tggtgtctac	aagatacaag	tccctgggta	ccattcactt	aacaagtgat	ggatgaggca	6960

```
7020
tgtttctggc ttccaagaaa tttggggaca tatagaaaac acaaagaatt ccactcaatc
                                                                     7080
acaaatttaa cttgcccatg aaaatactat cagtgatcat tattgtttgg tttctgggtt
ttttgttttt tgatggagtc tcgctctgtt gcccaggctg tagtgcagtg gtatgatttg
                                                                     7140
                                                                     7200
ggctcactgc aacctccgcc tgctgggttt aagtgattct gcctcagcct cccgagtagc
tgggactaca ggcgcccgcc accacacccg gctgattttt ttttattttt tagtagagac
                                                                     7260
                                                                     7320
agggtttcac catgttggcc aggctggttt tgaactcctg acctcaagcg atctgtcctc
                                                                     7380
ctcaacctcc aaagtgctag gattacaggc atgagccacc acacccggcc tatcggtgat
                                                                     7440
cattattaac cccaaggtct aattgcagat acccaacacg accaaaccag tggctcccct
ccctacatct tccccctatc tgctacctcc ctctttccct tcactcactg aagcacttct
                                                                     7500
                                                                     7560
acacctggtt gtggaaatca gagacctaaa agtcatcctt gaatcctcca tcccatcagt
                                                                     7620
aaatcccatc aactctgcct cccaaaacac cccagtctac tgcttctcat tcgccactgc
                                                                     7680
tgcccttcag gcatgagtca ccatcatctt tctccaggag aaccgtgatg gactagagat
                                                                     7740
ggaggcttga tggagagccg cagagtggag gagggagaga taggggggtgg gaaggagacg
agccaggggt gtgttcatcc ctggcaaatg ggagagacat tgggtggggg agaaattata
                                                                     7800
gagtaaatgc ttcaatgatc gaaggcaagg gcttagcaga ggtaacctga caatagtttt
                                                                     7860
                                                                     7920
tggtgtatca gcaggaggta acgggggtat cagaaatgtg cacgtatatt tacccctacc
                                                                     7980
ttgtgtgggt actaggttga gcacttttgt tttttgagat ggagtctttc tgtcacccag
                                                                     8040
gctggagtgc agtggcatga tctcggctca ctgcaacttc gcctcctggg ttcaagcact
tetectgeet cageeteetg agtagetagg attacagttg cetgecacca cacceageta
                                                                     8100
atatttttta tttttagtag agactgggtt tcaccatgtt gacaaggctg gtcttgaact
                                                                     8160
                                                                     8220
cctgacctca agcgatcctc ccatcttggt ctcccaaagt gctaggatta cagatgtaag
ccaccgcacc cgaccaggtt gagtactttg catgcagaat cttacttaac tctcagaaag
                                                                     8280
                                                                     8340
gctttgaggt aggcatacac ttgtatgagt gacctaagat ctgactggta tgaactgcta
agatgtgatc atctaggtat gtaagaagtg tgcgtgagag taattgctaa tctctatccc
                                                                     8400
                                                                     8460
ttagggaggt ttacggccag tgttgctctt ccgcagtata ttggtaatct ttaatcatgg
                                                                     8520
tttggtctga aagtaaacag ttgttaaagt agcttggtca ttaaagccaa attgcatatc
tecageceag tgtetettet gatetgtgee ttgttaetae tgeeceatga acatgecaaa
                                                                     8580
ttcaacattt tccaaacgaa gtttctcctt ttctcatcca tgcttcacta aacttcctcc
                                                                     8640
tetgeactee etageageaa aaageaceat catetgeeca gttgteeage cagatetatt
                                                                     8700
                                                                     8760
actgacacct gcctacctct ctttctcccc tcttctgtcc tttttttcca ccttcccagt
                                                                     8820
cagtcagtca ttcatatctg tgttctttct tccccctcca aatctacccc tgcctgacca
                                                                     8880
cctttgcctt cattcaggcc ctcacctgat cttgcctgga gggttctgat gctttctccc
                                                                     8940
tggaaggcct tgccttaggc tgaagatctg atttcagggg ggtagggggg ttggccccca
                                                                     9000
ateggeetee eagaettaae tetateeete tttgeaetee gateeetagg etgaceeatt
cccctttact ttttcacggt gccccacttc cctgcctttg catatcctgc tttctctgcc
                                                                     9060
tacagtgtag aggtcatttt cttctgggat tctttagagc tctgcagggc tgacatttac
                                                                     9120
                                                                     9180
aggggcctgt gctgcttgcg tgtgttgttca gcatttggtg tgcatgactt cttatcacac
tcagcccctg tgatcctcat ttgattggtc acagtaactt cataagctgg gcggtattgt
                                                                     9240
                                                                     9300
tattcccagt ctacagatga aaactgaagc agcttagagt tgcagcaact tctctgtggt
                                                                     9360
acagetactg agggtagagg taggeetega eccegggeag tetggeteea ggetetgtae
tettaaceae actggattge etggetttag tececeteat egeceeteet ggaetgagee
                                                                     9420
                                                                     9480
ccttgaaggc aagagtgttt tgagaaacag tgatttgttc gttagttttt atatacagaa
aagaagagga aaacaaaaat ggtctatatc tccctgttaa aataactata gttgatattt
                                                                     9540
                                                                     9600
taaaaaaatc aaagtagtca tttgccacat aatgatgttt cagtcataaa ctgtatatat
gacgatggtc ccataagatt ataatattct ggccgggtgt ggtggctcat acctgttatc
                                                                     9660
ccagcacttt gggtggccga ggcgagtgga ttgtctgagc tcaggagttt gagaccagcc
                                                                     9720
tgggcaacat agtgaaaccc tgtctctact aaaatacaaa aaattagcca ggtgtggcgg
                                                                     9780
```

cgtgtgcctg	tagtccagct	acttgggagg	cagaggttgc	agttagctga	gatcatgcga	9840
ctgcactcca	gcctggcaac	agagtgagac	tctatctcaa	aaaaaaaaca	tatatatata	9900
tacacatata	tatatacgta	tatatata	cacatatata	tatacgtata	tatatatatg	9960
tgtatatata	tatatacgta	tatatatatg	tgtatatata	tatacgtata	tatatgtgta	10020
tatatatatg	tttttttt	gagatagata	tatgtatata	tatatatacg	tatatatata	10080
	tatatacgta					10140
	tatatatacg					10200
	ttttctatgt					10260
	tacagtaaca					10320
-	ggtgtgtagt					10380
	tagcagtgaa					10440
	atgactattg					10500
	actggcttga					10560
	ttagtcacct					10620
	ttttttttg					10680
	cttaaacgat					10740
	cacctggcca					10800
	actcttgttg					10860
	cctgggttca					10920
	ccaccacatc					10980
	gctggtcttg					11040
	attacaggtg	_				11100
	gtttttgttt					11160
	cagaaaggca					11220
gaactactaa	atacagtgtc	ttgggtattt	ttctaaagtt	tttaaaaaat	gaaattattt	11280
tgcattttgt	tcacttggta	aattttggag	gtcatctcat	cagtatattt	atctttcgca	11340
tgtttttcta	ggagttatgt	ggttttacat	tgtaagaact	ttagaaaaat	acatttagcc	11400
agttctgtaa	cactgaattg	tatactaggt	tttagctgac	ataagcagtg	tgtcagtccc	11460
tttatatgta	cctatttgtg	taggtacaac	tggtccctgg	cttatgaagt	ttgacctgat	11520
ttttttcgac	tttacaatgg	tgtataacca	tactttgagc	actcacacgt	tgttttttt	11580
tctttcttta	agagacaggg	tctcttggct	gggagcagtg	gctcacgcct	gtaatcccaa	11640
cactttgaga	ggccagggtg	gcggatcact	tgagctcagg	ggtttgagaa	cagcctgggc	11700
aacatagtga	gaccttgtct	ctaaaaaaca	caaaaaatta	gcctggtgta	gtggcacgca	11760
cctgtggtcc	caggtactca	ggaggctgag	gtgggagagt	aacttgagcc	taggaggtgg	11820
aggctacagt	gggccacagt	catgccacta	cactctagcc	tgggtgacag	agtaagaccc	11880
catctcaaaa	aataaaaaat	taaaaaaaaa	gatcttgctc	tgtcacccag	gctggagtgc	11940
agtggcacaa	ttatagcttt	ttgcagcctc	gaactcctgg	gctcaagtga	tcctgccacc	12000
tcagtcttct	gtgtagctag	gactgcaggt	gcatgccatc	acacttggct	aactttttaa	12060
tttttttgta	gagatggggt	ctcgctatgt	tgcctcagtt	ggttgtaaac	tcttggtccc	12120
atgcagttgt	cctaccttgg	cctcccaaag	cactgggatt	acaggtgtaa	gccaccgtga	12180
ctggccccgt	tctattttc	actttcagta	cagtgttcaa	tgagttacat	gaggtactaa	12240
acacttcatt	gtaaaagaag	ctttgttttg	cccagctgta	ggctaatgta	ggtgttctga	12300
gcatgtttaa	ggtagggtag	gttaagctat	gatgttcagc	aggttatatg	tcataaatat	12360
atcttcaact	taggatattt	tctacttagg	atgggttttc	caagatgtta	accccatcca	12420
ttgtgttaat	aagttgagga	gtttatctgt	gtgtgtatgc	atcatggtgt	cctttagcaa	12480
atacagtctt	agcagtggaa	attgctggca	gtatgatagg	gacacttgaa	aattgcatag	12540
ataattgcca	acttgaaggc	agagggtggt	gctctttgca	tctcagagcc	tagcaaaggt	12600
aggtagttgc	tcaacaaacg	gactaatgtt	ctaatgcaaa	tgctgaatgc	tccactttgg	12660

```
12720
aagggggaga atttagaggg caaaggggaa tcgcacaggg tcttaaagtg caacagccac
                                                                    12780
agtccttcct ttttggggaa aaaaaaaaaa agtcccggcc gggcatggtg gttcacgcct
gtaatcccag cactttgggg aggccaaggc gagcggatca cgaggtcaag agatcgagac
                                                                    12840
catcctggcc aatatgatga aaccccatct ctactaaaaa tacaaaaatt agctgggtgt
                                                                    12900
                                                                    12960
ggtggcacgc gcctgtagtc ccagctactt gggaagctga ggcaggagaa tcgcttgaac
                                                                    13020
ccgggaggcg gaggttgcag tgagtcgaga tcacgccact gcagcaagac tctgtctcaa
aaaaaaaaa aaaaaattta aaaagtccca aatctgccac catttattct tgatcttttt
                                                                    13080
cagaagegge accatgtaet acagaegget catecetece etttgteagt gtatagaggg
                                                                    13140
ttctttggat gtagacactt ttcaaagacc aatgagctgc tgcagaagtc tggcaagaag
                                                                    13200
cccattgact ggaaggagct gtgatcatca gctgaggggt ggcctttgag aagctgctgt
                                                                    13260
                                                                    13320
taacgtattt gccagttacg aagttccact gaaaattttc ctattaattc ttaagtactc
                                                                    13380
tgcataaggg ggaaaagctt ccagaaagca gccatgaacc aggctgtcca ggaatggcag
                                                                    13440
ctgtatccaa ccacaaacaa caaaggctac cctttgacca aatgtctttc tctgcaacat
                                                                    13500
ggcttcggcc taaaatatgc agaagacaga tgaggtcaaa tactcagttg gctctcttta
                                                                    13560
tetecettge etttatggtg aaacagggga gatgtgeace ttteaggeac ageectagtt
                                                                    13620
tggcgcctgc tgctccttgg ttttgcctgg ttagactttc agtgacagat gttggggtgt
ttttgcttag aaaggtcccc ttgtctcagc cttgcagggc aggcatgcca gtctctgcca
                                                                    13680
                                                                    13740
gttccactgc ccccttgatc tttgaaggag tcctcaggcc cctcgcagca taaggatgtt
                                                                    13800
ttgcaacttt ccagaatctg gcccagaaat tagggctcaa tttcctgatt gtagtagagg
                                                                    13860
ttaagattgc tgtgagcttt atcagataag agaccgagag aagtaagctg ggtcttgtta
                                                                    13920
ttccttgggt gttggtggaa taagcagtgg aatttgaaca aggaagagga gaaaagggaa
ttttgtettt atggggtggg gtgattttet cetagggtta tgteeagttg gggtttttaa
                                                                    13980
                                                                    14040
ggcagcacag actgccaagt actgtttttt ttaaccgact gaaatcactt tgggatattt
                                                                    14100
tttcctgcaa cactggaaag ttttagtttt ttaagaagta ctcatgcaga tatatatata
                                                                    14160
tatatttttc ccagtccttt ttttaagaga cggtctttat tgggtctgca cctccatcct
tgatcttgtt agcaatgctg tttttgctgt tagtcgggtt agagttggct ctacgcgtag
                                                                    14220
                                                                    14280
gtttgttaat aaaagtttgt taaaagtttg ttttgtgcaa gtgtcctttg tgcgtccagg
ccagggcatc catggacgtc cttgggctgc cctttccctt ggcgcctccc agggttccca
                                                                    14340
tageaaceae egtetgeagg aggggeegee ettgeecete etceeegeee tgeegeteag
                                                                    14400
tggaacggcc caaccctccc ctggctgcgg tgagcgctgg gcccaacccc cggcctggag
                                                                    14460
cagegeecca aeteegagea eegtggagea eeggetgeea getgagaeee eagaggggta
                                                                    14520
actaacggcc tgaggaaggc atttcttcgg ggaaacatgg cgtgcccgtc gtggctacgt
                                                                    14580
                                                                    14640
tetgecaage cetgtgaegt tggaggggag cegeetgeat eeceegetea geeagtgttt
ctagatccga gacatctgga actcggaagt gaggccaggg ctccaggaag actccctgat
                                                                    14700
gacgcactgg cccgcagccc aggctcaggt agtgggggct gtcaggatga tctgtgggat
                                                                    14760
                                                                    14820
ccccagtgt ccgaagaaag aagccacaat tgtgtttttt tttctttctt tcttttctt
                                                                    14880
tttttttttt tgagcgagte teactetgte geteaggetg aagtacagtg gegegatete
                                                                    14940
ggeteactge aacetetgee tecaggggte aageaateet eecaceteag eeteecaagt
agctgggatt acgagcatgc actaccacgc ccggctaatt tttgtacttt tagtatagaa
                                                                    15000
       176
599
DNA
Homo sapiens
<400> 176 cgggacgcgg atgcagacgc aggcggaggc gctgacggcg gggatggccg gggtggccac
                                                                       60
agetgeegeg ggggegtgga cacageegea geteeggeeg gtggagetee eecagegeae
                                                                      120
                                                                      180
gcgccaggtc cgggcagaga cgccgcgtct gccgcagggg gtcacgaatg cggccgcaca
tattcaccct cagcgtgcct ttcccgaccc ccttggaggc ggaaatcgcc catgggtccc
                                                                      240
                                                                      300
tggcaccaga tgccgagccc caccaaaggg tggttgggaa ggatctcaca gtgagtggca
```

```
360
ggatectggt egteegetgg aaagetgaag aetgtegeet geteegaatt teegteatea
actttcttga ccagctttcc ctggtggtgc ggaccatgca gcgctttggg ccccccgttt
                                                                      420
cccgctaagc ctggcctggg caaatggagc gaggtcccac tttgcgtctc cttgtaggca
                                                                      480
                                                                      540
gtgcgtccat ccttccctag ggcaggaatt cccacagttg ctactttcct gggagggcct
                                                                      599
catgttttat ctggttctta aatgtttgtt actacagaaa ataaaactga ggtattatt
       177
2457
DNA
Homo sapiens
<400> 177
cgctgttgcc tccgccacct cctccgccgc cgcgcgcccc tcggagttcc gcgccccacc
                                                                        60
                                                                       120
atgcccaaca tcgtgctgtt cagcggcagc tcgcatcagg acctatccca gcgcgtggcc
gaccgcctgg gcctggagct gggcaaggtg gtcacgaaga agttcagcaa ccaggagacc
                                                                       180
                                                                       240
agcgtggaga ttggtgaaag cgtgagaggg gaagatgtct acatcatcca gagcggctgc
                                                                       300
ggggaaatta acgacaacct gatggaactc ctcatcatga tcaatgcctg caagattgcg
                                                                       360
tcatcatcca gagtaactgc cgtgatcccg tgtttcccat acgcccgaca agataaaaag
                                                                       420
gacaagagtc gtgccccaat ttctgcaaaa cttgtggcca atatgctgtc ggtggctggg
                                                                       480
gcggatcaca tcatcaccat ggacctgcat gcttctcaga tacagggatt ctttgatatt
                                                                       540
cctgtggata atttgtatgc ggagcccgca gtcctgcagt ggattcggga aaacattgcc
gagtggaaga actgtatcat tgtttcacct gacgcagggg gagccaaaag ggttacatca
                                                                       600
                                                                       660
attgcagaca ggttgaatgt ggaatttgct ttgatccaca aagagaggaa gaaggcgaat
                                                                       720
gaagtggacc ggatggteet ggtgggegac gtgaaggace gtgtggeeat eetegtggat
gacatggctg acacttgcgg caccatctgc catgctgcgg acaagctgct gtcagctgga
                                                                       780
gccaccaaag tgtatgctat ccttacccat gggatcttct ctggaccagc tatttccaga
                                                                       840
ataaataatg ccgcctttga ggctgttgtc gtcacaaaca caattccgca agaggacaaa
                                                                       900
                                                                       960
atgaaacact gcaccaagat tcaggtcatt gacatttcca tgatcttggc cgaagcaatc
                                                                      1020
cgaaggacac acaatgggga atccgtgtcc tacctgttca gccatgtccc gctataaatc
                                                                      1080
cagaatggga agtgtccagc aagcctactc tgacttctga cttgtttttg ttttctggat
                                                                      1140
ttttagctgt aggtattcag caatgatagg ttaatcactg gcaaaagcat cagatctttg
                                                                      1200
tatatgctaa gatttattgt ttccccttct aaagctcaag atcatttctt tccagttttt
                                                                      1260
ggggaaatgg tggtggttat ttggtcttta agtgaactgt cttaaatgag aaacgttttt
gtcattttga cttttaacag gtacaggtga tctcttcctt tgttctttca gtactttgag
                                                                      1320
                                                                      1380
gcgacaactt tcaagtatat aatttcattg tggaagtcat agtttatata tttcgaggtt
                                                                      1440
gccaaaggtg acttcacatt aaagccttct gtgtaaatat atactgataa tgcctatgga
catttgggta aaaccctgta tagaattaat tatcctttta ctttggagtg aaccttggaa
                                                                      1500
                                                                      1560
aatttataat tataatacca tggattttga attttccttt ttttttttt tttttggata
                                                                      1620
actcagtttc agataaacca tcttggttac tgtgcttaat ttggaccaaa ttttatttag
                                                                      1680
cttaatatgg acactgacac attttggggg gtatacatta gacatatcag agcagtgtat
ttctggatca ttttttaaat gacctcttct aaaacataac tgtcacttac ctgaaatgct
                                                                      1740
gcatcctaaa attccaaaat tatattgagc aatcgccaag gcctaaagcc aactgactta
                                                                      1800
                                                                      1860
aaggtaatca tttcagctaa gattaaattt aaagcctaag aatgtataga gctagtttta
aaataatgat ctcagatttt taaaaaggat ataggaacct gcattgtcat tctctgaatt
                                                                      1920
                                                                      1980
aagaactgat ggtttctatc attatttagc cccacctttg tattttaaaa tccttcagaa
tacatttatg aaccaatgcg actggactta gccacacaca atggaaattc agaccttgac
                                                                      2040
tatttggtgt ttccagttca caaaggtgat gaagactgtc ttgggagcag cttaatccca
                                                                      2100
                                                                      2160
aaatttgtac atttcttgct gctcctggcg tggaaactta agtgagacca ccaaatacat
tggtcctgtc caattctact gaatgggggt ggacctggca tttatctggc caaaaacagg
                                                                      2220
                                                                      2280
agccagagaa atatgaatat accaaagttg tttgtttagc ctccaactta aattacatta
                                                                      2340
gtcaacttat agatactcat atgatcactt ttctttttag atactacatc aactagattc
```

aggagtatat catttgcagt gcttg	tattg gtttaaaatg	taagatttta	agatcctcta	2400
acactgtact aaaacatttc aataa	aatca ttctgactgc	gttcaaaaaa	aaaaaaa	2457
<210× 178				
<210> 178 <211> 1882 <212> DNA				
<213> Homo sapiens				
<400> 178 gggcaggaag acggcgctgc ccgga	aggage ggggegggeg	ggcgcgcggg	ggagcgggcg	60
gegggegga gecaggeeeg ggegg				120
cgcgctccgg ccggtctgcg gcgtt				180
agatgetgea gteeetggee ggeag				240
cctggtgctt cggcttcctg gtgct				300
tetteteete ggtggagetg ceeta	atgagg acctgctgcg	ccaggagctg	cgcaagctga	360
agcgacgctt cttggaggag cacga				420
gccgggtgct ggaggccagc aacta	eggeg tgteggtget	cagcaacgcc	tcgggcaact	480
ggaactggga cttcacctcc gcgct	cttct tcgccagcac	cgtgctctcc	accacaggtt	540
atggccacac cgtgcccttg tcaga	atggag gtaaggcctt	ctgcatcatc	tactccgtca	600
ttggcattcc cttcaccctc ctgt	cctga cggctgtggt	ccagcgcatc	accgtgcacg	660
teaccegeag geeggteete tact	ccaca tccgctgggg	cttctccaag	caggtggtgg	720
ccatcgtcca tgccgtgctc cttgg	ggtttg tcactgtgtc	ctgcttcttc	ttcatcccgg	780
ccgctgtctt ctcagtcctg gagga	atgact ggaacttcct	ggaatccttt	tatttttgtt	840
ttatttccct gagcaccatt ggcc	ggggg attatgtgco	tggggaaggc	tacaatcaaa	900
aattcagaga gctctataag attg	ggatca cgtgttacct	gctacttggc	cttattgcca	960
tgttggtagt tctggaaacc ttctg	gtgaac tccatgagct	gaaaaaattc	agaaaaatgt	1020
tctatgtgaa gaaggacaag gacga	aggatc aggtgcacat	catagagcat	gaccaactgt	1080
ccttctcctc gatcacagac cagg	cagctg gcatgaaaga	ggaccagaag	caaaatgagc	1140
cttttgtggc cacccagtca tctg	cctgcg tggatggccc	tgcaaaccat	tgagcgtagg	1200
atttgttgca ttatgctaga gcac	cagggt cagggtgcaa	. ggaagaggct	taagtatgtt	1260
catttttatc agaatgcaaa agcga	aaaatt atgtcacttt	aagaaatagc	tactgtttgc	1320
aatgtcttat taaaaaacaa caaa	aaaaga cacatggaac	aaagaagctg	tgaccccagc	1380
aggatgtcta atatgtgagg aaatg	gagatg tccacctaaa	. attcatatgt	gacaaaatta	1440
tctcgacctt acataggagg agaa	tacttg aagcagtatg	ctgctgtggt	tagaagcaga	1500
ttttatactt ttaactggaa actt	iggggt ttgcatttag	atcatttagc	tgatggctaa	1560
atagcaaaat ttatatttag aagca	aaaaaa aaaaagcata	. gagatgtgtt	ttataaatag	1620
gtttatgtgt actggtttgc atgta	acccac ccaaaatgat	tatttttgga	gaatctaagt	1680
caaactcact atttataatg cata	ggtaac cattaactat	gtacatataa	agtataaata	1740
tgtttatatt ctgtacatat ggtt	aggtc accagatcct	agtgtagttc	tgaaactaag	1800
actatagata ttttgtttct tttg	atttct ctttatacta	aagaatccag	agttgctaca	1860
ataaaataag gggaataata aa				1882
<210> 179				
<211> 2969 <212> DNA				
<213> Homo sapiens				
<400> 179 ctaaattacc cactacgttg cttg	atatt taaaqttqqa	gttcgttqct	aaagatqqca	60
gaccagatg tcctcactga agtte				120
cggggatttt atggcattga gcat				180
gtgaaagagg aggatatgct ggag				240
ttgaataatt taaagggaga caag				300
gacgggaaaa ccactcgcca taac				360
5 555		<u> </u>	5 5 5	

```
420
gtaaaatata aactggacca catgagaaga agaattgaga ccgatgagag agattcgacc
aaccqqqctt ccttcaaatg tcctgtctgt agtagtactt tcacagactt agaagctaat
                                                                    480
cagctctttg atcctatgac aggaactttc cgctgtactt tttgccatac agaggtagaa
                                                                    540
gaggatgaat cagcaatgcc caaaaaagat gcacgcacac ttttggcaag gtttaatgaa
                                                                    600
                                                                    660
caaattgagc ccatttatgc attgcttcgg gagacagagg atgtgaactt ggcctatgaa
                                                                    720
atacttgagc cagaacccac agaaatccca gccctgaaac agagcaagga ccatgcagca
                                                                    780
actactgctg gagctgctag cctagcaggt gggcaccacc gggaagcatg ggccaccaaa
                                                                    840
ggtccttcct atgaagactt atacactcag aatgttgtca ttaacatgga tgaccaagaa
                                                                    900
qatetteate gageeteact ggaagggaaa tetgeeaaag agaggeetat ttggttgaga
                                                                    960
gaaagcactg tccaaggggc atatggttct gaagatatga aagaaggggg catagatatg
                                                                   1020
gacgcatttc aggagcgtga ggaaggccat gctgggcctg atgacaacga agaggtcatg
cgagcactgc tcattcacga gaaaaagact tcctctgcca tggctggttc agtgggggca
                                                                   1080
                                                                   1140
gctgctccag tgaccgctgc caatggcgat gactcagaaa gcgagaccag tgagtcagat
                                                                   1200
gatgattete caccecgtee ggeagetgtg getgtgcata aacgagaaga ggatgaagag
gaagatgacg agtttgaaga agtagcagat gaccccattg tcatggtggc tggccgtccg
                                                                   1260
ttctcctaca gtgaagtgag ccaacggcca gagctagtgg cccagatgac accagaagaa
                                                                   1320
                                                                   1380
aaggaagcat atatagcaat gggacaacgc atgtttgagg acctctttga gtgagctttc
                                                                   1440
cctaattett teteetttet etaatgetea gtteaaaaag gaatgtetea tetttgaaga
aaaqtattta aqtqqctttc tgcccctctt gatgtaagca actgtccatc cttgtgcaaa
                                                                   1500
gattgatggt agagagettg aettttatge cagaaaettt eecageaagg tagggtgetg
                                                                   1560
1620
                                                                   1680
tttttttttt tttttggaga tgaagtctca ctcttgtacc ccaggctgga gtgcaatggc
                                                                   1740
gtgatctcgg ctcactgcaa cctctgcctc ctgggttcaa gcgattctcc tgcctcagcc
                                                                   1800
tcccgagtag ctgggattac aggtgcctgc caccatgcct ggctaatttt tgtattttta
gtagaggcag ggtttcacca tgttagccag gatgatctcg atctcctgac ctcatgatcc
                                                                   1860
                                                                   1920
accegecteg geeteecaaa gtgetgtatt ttettatetg attttttet tgeettatta
agacataatt ttctcccttc tgaaatgagt gagggaagtt cataaggtaa atccttccca
                                                                   1980
                                                                   2040
tccatctgtt tactacaata ggttacaata attcactgat cacatccatt ttatctgttc
                                                                   2100
tagecaggea ttecaaacaa tttettatae tgetgeecae caaageaget tgecaacagt
caaatcactg attgggggaa aaaatcctga aattttgctt agaatttgag catttcctca
                                                                   2160
aaattgagat ggatcaatat gtaaggggag gtgggagcgt gtgtggaagg gggagagata
                                                                   2220
tacttgagtc ttatgattaa tgtctaaacc agaatttgtg tctttagaac tgaccagact
                                                                   2280
                                                                   2340
ggtagatttt attgtattgc ttaatgtctt ttggtttgga tttaggatga tagaaaacag
                                                                   2400
aagtataatt ggtaaaccct taggaagaaa ttagaaaaac atggacgtaa gacaaaaagt
ctctgtgaag ggttgaagag tgacaagcat tggtaacagt gccttagaac tgtgtcagtt
                                                                   2460
agtctgattt ggaaatcctt tatgtaaagc tgagactggt cctggttttg ttccctttgg
                                                                   2520
tacaqacctc ttgtcagtgc tataaattgt ttaatgaggc cattccagca gaaatcaaca
                                                                   2580
gaataattga ttactcttct ctctctctgt cactctccct ctttctaaac atcattgaag
                                                                   2640
                                                                   2700
gctgtctctc tttaattttg tcagacacag tattttaggg tgcatccagt ataccattga
                                                                   2760
gcattgtaac ctcaggaaac agtttatttt gggttctgat atgtagcatg gtattttccc
taaggcagaa ctttaaaaat aaagaacttt cacacaaggg tctgtaacaa ttgtatatct
                                                                   2820
tacaatattt ttccttgcat tgtaattttt aagtatttat cattttatag tacacatgta
                                                                   2880
                                                                   2940
aagaatatat gagcettgta tggagtgatg tttcatttac ctgggttgtg ttaatgactg
                                                                   2969
aatgttgaca ataaatctgt tttatactg
```

<sup>&</sup>lt;210> 180 <211> 65608 <212> DNA <213> Homo sapiens

## <221> misc feature <223> n=a,t,g or c

<400> 180 ccgccccag ccccagcccc gccgggcccc gcccccgtc gagtgcatga ggttgacgct 60 actttgttgc acctggaggg aagaacgtat gggagaggaa ggtgcgcggg ccgcggggtg 120 tggggcgagg gcctggaggg ggtgcccggg cagcgtgggg cacgggaggg ggccgggtct 180 240 gccaggaggc cgcgccctgc ctcctccggg atgagctcgt ccttacgaag cccgcaggcc cctccctgtc cccctcccgc ccgggatccc cctccccggc ccccggcgag ctgccctcct 300 360 gegggtetgg gggeeeetgg accettttte etecteeae gteeeeege gaaggaetee cagacactgc ccaccccgcg tcggcctcca tccgcgtgct ctgtccacca cccgggcctc 420 480 gctggggcca ccctttatcc agtctcggaa gaaagagcgg ctgggggacac agccccgggt 540 eccagtggee geetgeeegg etetgtgaee ttgageeagg egetgaette etggteetea gtttcccctt ctgtacattt ggaaactggg tagttgcccc cccggtgtcg gtgattgggg 600 660 gccagatggg tagagcggag ataggcgtcc aggaagccgg aggccgtgta ctgcgggagc ctcatccact ctccctgtcc gtgccccaaa cccggtgcct gccctcagtc ttggctggga 720 780 gcatgactca tectaacete etetttagee eetteteeet eactggggee caaggegeag 840 tactgcactg cagttagggt tcaaggactc ccccagccta ggacagggtc tgggggcccc teettggate teettegetg acetgteact tagateeace tggeeceaag geagggeetg 900 960 actccacacc teceectgee accaactett eccaggeeca tgaaaacetg attggggtag 1020 gggcccacct tcctgtagcc cctgcctacc taaggtacct gcgtcttcac agagggtcag 1080 gctgttgtgg ccttgggacc tagctatgtg actgggcaag ccatgccatc tctggggctc 1140 agteteeeet tetgtacagt ggagagggge aggtetgggg catttteeag ggeeeaeeag ctccaagggt gccaggcccc aaggatgact aagcatcgtg tggctggcta gaggaggtgc 1200 caggeeteee tgggacaggt gtetgggagt acceaegtet geageeeett eeeettgeea 1260 1320 agccagggca ttcattgcca aggatctgtt agggccggca cctccaggct tcctgccctt 1380 gacctcccag ctggcttcag cccaggatgc actaatccag ccctgtccag tccctgcctt 1440 tgaagggccc tcttagtact tcttcctggg caggagaggg aagaaaggag gctgtgatag 1500 gaatgtcacc cactgcctta tccctaaagc cactgcttcc tttctcctca tttaccttgc cagatccaat gctatagcgg gaggatggac ctgatcctcc tcctaagctg atacataggg 1560 aaacagggcc agagaagctt ggcaacctag tcagtatctc agcaagactc aggccagcgc 1620 cetttettet cetatttgge acagegactg ceetgeetgg gegetgeaca tgtgeagtgt 1680 gcgaggattg gtgcaggtgt aggtatatgt ggggtgggca gggcaagctg ggcctgcacc 1740 agatcacact teetgagaat getteecaac teeetteeca eeetgeagga agegagttge 1800 ccgtgtgtgc aagctgcggc cagaggatct atgatggcca gtacctccag gccctgaacg 1860 cggactggca cgcagactgc ttcaggtagg gtggggtgcc cagggcctgt gttgccctaa 1920 1980 acaaggeetg ceagagagga caggetggte aaggaatggg ggaggeeggg atatgeetee tggtgccgtc ccctattgtg acttcgtggc cttaatttac catttatgac atgaggtgtt 2040 ttgactagaa aatccctaca ggccttcctg ttgtcatttt atttatctat ttttttttct 2100 ttttgagacg gagtctcgct ctgtcaccca ggctggagta cagtggtgcg atcttggctc 2160 2220 attgcaacct cttcctcctg ggctcacgca gttctcctgt gtcagcctct ggagtagctg 2280 ggattacagg cgtgcaccac cacgcccagc taatttttgt atttttagta gagacgggtt ttgccatgtt agccaggctg gtctgaaact tctgacctca agtgatcttc ccacctcagc 2340 2400 ctcccaaagt gctgggatga cagacataaa ccaccgctcc tggcctcatt ttattttctt 2460 ttatgtattt ttctttttc gaaatggtct tgctctgttg cccaggctgg agtgcagtgg tgccatctcg gctcattgca acctccatct cccgggctaa agtgatcctc ctacttcagc 2520 2580 ctcccgagta gctgggatta taggtataca ccacaatgct cagctaattt tttaaatttt gtgtaaagac agggtctcac tattgagacc caggctggtc ttgaacttgt gacctcaagc 2640 aatceteetg eettggeete egaaagtget aggettacag gegtgageta aegeettgge 2700

ctctgttgtc	atcctagatc	tctgagatct	aaatcttaga	gaggatggga	gagacctcca	2760
attgagccag	tgcctgcaat	tcagccccct	gctggcaccc	agacaggggg	aagagttgga	2820
aggaatgtcc	ctcctgcctt	ctgggtgttc	atgctcttgc	agggagggaa	gacaaaccag	2880
gccttaaggg	aaaccaggcc	accctcagtg	tcttcccagg	ctgcttgcga	acatgcataa	2940
cccagtcaca	ccagccccag	tgtccagaca	cacacccaca	ggtaggaaga	aagtagggtc	3000
agggttgtgg	cggaggataa	agagtacatg	aggacctgaa	ggtcacccag	taggaccatc	3060
ctgagaagcc	aggagcaggg	gtctacctgc	cttgagccag	agcagggcca	gagcaggggt	3120
ctcaaaggat	gtgagatttc	ctgggtagaa	aagtagagtg	gaggtggggc	gtggtggctc	3180
acacctataa	tcccatcact	ttttggggct	gaggtgggca	gatcacttga	gttcaggagt	3240
tcgagacaag	cctgggcaat	atggcaacac	cctgtctcca	ctgaaaatac	aaaaaattag	3300
ccgggcgtgg	tgcgcatgcc	tgtagtccca	gctactcaag	aggctgaggt	ggcagggtta	3360
cttgagcctg	ggaggtggag	gctgcagtga	gctatgatcg	caccactgca	ctctagcctg	3420
ggcaatagag	cgagacccag	tctcaatttt	taaaaaagaa	agaaagaaaa	acaaatggtg	3480
tgggagagaa	ttacaggcat	agtcaccaaa	cagcaaggtt	caggggagaa	aactccataa	3540
aagggtagaa	ggtgaagctt	ctgggatgcc	cagcaggggt	caagacatcc	accactagga	3600
ctttatttta	ggcttctgcc	ttggtttatt	ttttggtttt	tggtttttt	gagacagtct	3660
tgttgtgtcg	cccaggctgg	ggagcagtgg	cgcgatccct	cctcactgca	acctccgcct	3720
	agcgattctc					3780
	cggctaagtt					3840
	gaactcctga					3900
	atgagccact					3960
	cagggtcttg					4020
	ctccagctcc					4080
gctgggatta	caagcataag	ccaccatgcc	cagcctgttt	tttcttttt	aggaataacg	4140
tctaacgttt	tctaacattc	agtaagggac	aacccctgtt	ctaagtactt	tgcatagtta	4200
gatattagtg	ctgtctttgt	tttgccagag	agaaaattgg	gacacagaga	ggttaattct	4260
cttgatgaaa	gtcacacagc	cagtgagtga	aatgaacaca	ctcagtgtgg	ctgaaaggag	4320
	tgccctggga					4380
gagggctctc	aacaggcaga	ggaaaccatc	tgcacagcgg	tgggatggtg	cggactgctg	4440
agggaacagg	aacagttccc	ttggaaggaa	cagaataagc	tgagggatcc	aacaagaaac	4500
aaagttgaga	ccgattcgtg	aagggccttg	aatgccaaga	taaggagttt	cagaagtcag	4560
gatgggggtg	gtggctcatc	cccgtaatcc	cagcactttg	ggaggccgag	gcaggcagat	4620
cacttgaccc	caggagcttg	agaccagcct	ggccaacgtg	gtgaaacccc	cgtctctact	4680
aaatattcaa	aaattagcca	ggcatggtgg	cacatgactg	taatccaagc	tactcgggag	4740
gctaaggaag	gagaatcact	tgaacctggg	aggcggaggc	tgcagtgagc	tgagatcacg	4800
tcactgcact	ccagcctggg	agacagagcg	agactccatc	tcaaaaaaaa	aaaaaaaaa	4860
aaatagaagg	gagtcggcag	aaagccaggg	aggggctggg	gtgacatgct	gttgaagaat	4920
gccatcccag	tgggccggtg	gtggtatcta	ggcagggaag	ggactgtccc	agtaactcaa	4980
gggtctgagc	tcataggacc	tgacctggga	cagtgactga	ggatggagag	aatttcaggc	5040
agaagggaca	gtttttggtg	agtatttgtc	atattggcta	ccatgcattg	agcactcttc	5100
atgctaattt	gttaaatctt	catcataact	ctatgaggga	ctgtatgtgc	ccagtttgca	5160
tgggagaaac	agagattcca	tgcaatcaag	tgcctcgctg	aaggttgtaa	catctagagc	5220
tgggactaaa	accttctcac	tccacatcgc	cacagagtag	gaaaggcagg	ggctggcggt	5280
ggcacatgcc	tataatccca	gccctttggg	aggcggaggc	aggtggatct	cttgagccca	5340
ggagtttgag	accagtgtgg	gcaacatagt	gaaaccttgt	ctctacaaaa	aaattagctg	5400
agcatggtgg	tggtgcctgt	agtcccagct	actcaagggc	gctgacatgg	gagggttgct	5460
tgagcctggg	aggtggaggt	tgcagtgagc	tatgatcaca	ccactgcaag	ccagcctggg	5520
tgacagagtg	aaatcccatc	tcaaaaaaaa	gaaagaaagg	aagaaagaaa	aaggcagggg	5580

cttcggggag ggcatgggca ctggcgaatg gcagggtgga acctgaagcc atctggtttt 5640 5700 ctaacctggg cactggggag ttggtggttt gttgactctg atggaattgg gggtcatgtt 5760 ggggaggaga catgctcatc tgtgttgagc tggaggggac atgggctatc catggtggct 5820 gtgtcctgcc cagagctagc catgggagcc tgagtccagt tggaggtagg aaagtcagaa aaaacggccg cctcggagct ggccctgaga tggtgagtgg gatttgtgat agggccaaga 5880 5940 cgaatgaagg gaagaacttt ggggacccct gtgtctgcgg tgagggggga gatggagcct tgggtgatgg agagagggtc aggagtagag ccacagaagc cacaggaggg aagccgtgtt 6000 6060 acaggatggg tgtacctggc tttggagtgg cctgtcccaa atcactcacc aggagagggg tgagtccccg ggtcagggca gtaaagagga ggcatgtttg tgctgtccct ggtgtagtga 6120 6180 aactcaagaa ggaagccagg tgcagtggct cacgcctgta atcccagcac tttgggaggc caaggcaggc agatcacctg aggtcgggag tttgagacca gtctggccaa catggtgaaa 6240 ccccatctct actaaaaata caaaaattag ccgggcctgt tggtgggcgc ctgtaatccc 6300 agctactcag gaggctgagg cagaagaatc gcttgaaccc gggaggcagt gattgcagtg 6360 6420 agtcaagaat cgcgccactg cactctagcc tgggtgacag agcaagactc catctcgaaa aaaaaaaagt ctcaatatgg ggaaagatcc actagaagta agagccatgg cttctacctc 6480 6540 gtggcttgtg ggtgtgatac tcccaacagt ccccaaagct ggtggtcctc accgcgtgac agtgagcaga gcagctcaga gggggtcact gctcacctgg gtgcatggct gaccacagcc 6600 6660 aggetggete teagtgggat geecaaggtg etagaetetg ettagtetee etegggeeet 6720 gggettgagg cattgggeec ggeecagaec teattteatg caetgagaec tttgttecag 6780 ggcccctcac ccctctgaag gtgttcgggc aggggcaatg tgataaggcc atgaggggtc tgcagcetee ageceeactg gggaggtgge cagtgattte caeetteetg geceetetge 6840 atgcccctcc cagtggaact tcctagggtc cctgagtcag tcacttgcaa ataattatgg 6900 6960 cgtgcccact ctgcattagg cccctctcac aacaacccag taagggggtg ctatttattt 7020 attaaagcga tttttttttt gagtctcgct ctgtcgccca ggctggagtg cggtggcgca atcteggett actgeaaget etgeeteeeg ggtteacace atteteetge etcageetee 7080 caagtagetg ggactacagg cgcccaccac cacaccegge taattttttt ttgtttgttt 7140 7200 gtatttttag tacagacgag gtttcgctgt gtgagccagg atggtctcga tctcctgacc 7260 tegtgateeg eecaceteag eeteecaaag tgetgggatt acaggegtga gecacegtge ccggcaatat taaagcgatt ttaaggccaa ggctggtaac tcacgcctgt aatcccagca 7320 7380 ctttgggagg ctgaggcagg aggactgctt gaggccagga gtttgagatc aacctaggca acatagtgag actccatctc tacaaaaaaa ttagccaggc gtggtggtgc gtacctgtag 7440 tcccagctac tcaggaggct gagatgggag gatcatttga acccaggatg tcgaagctgc 7500 7560 agtgagetgt gateaegeea etgeaetetg geetgggeaa eagagegaga caetgtetea aatttttaaa aagcgatttt acaaatgagg tgcagagttc agtcacttgc caaaagtctc 7620 7680 acagegegtg aggagtagaa teaggaeteg aacegaggea geetggette agageetaca 7740 gtgtaaccac agettagtee cacaceteee agaecaacag ggteeetgee ttetagtggg 7800 caagacactc agtgaacaaa tgtagtgtca ggtattgggg gacagcactc tcaggaagtg atgtttaagg gacagaattg aagggagcag tgtttagagg atgtcggggg tagggccggt 7860 7920 gcatgtgcaa aggccttggg gtgggaatgt gcttggcaca actgaggacc acaaagccag cgtgcgggag tgcagtcagt ggccaggggt gcatagagcc ttgtgggccc cgtggaaggt 7980 gccgttggct gtacactttt tttttttttt ttttttttt tttttgagac agagtctcgc 8040 8100 ttttgttgcc caggctggag tgcagtggcg tgatctcagc tcactgcaac ctccgcctcc 8160 egggtteaag egatteteet geeteagett eetggtaget gggaetaeag gegeeeaeea ccacacctgg ctaatttttg tgtttttaat agagacgggg tttcaccatg ttagccaggc 8220 8280 tggcctcaaa ctcctgacct caagegatct gtctacctca gcctcccaaa gtgctggggt tacaggcatg agccactgcg cacaggcagc tgtgcatctt tgaatgtcat aacctgagca 8340 tetgagaget geteetgtee eetggeeeet getettgagg aagteeeaeg etgataggae 8400

agacagggtc	ataagtgctg	tgatgggggc	ctgcaggctg	ctggagggct	cagccgggac	8460
	ccctctttgt					8520
	gggttgtcac					8580
	ccgcctcccg					8640
tggctcacat	actgcctctg	cgaggtcccc	tccaggaagc	ctcctgtgca	caacccccag	8700
ggctgccgca	tccctggtag	catctccttg	gcagctgggt	gggctggccc	tgggcaagga	8760
	tgctgctggc					8820
ttcaggggac	ctttttggcg	aagacaaact	gtccatagga	agtcgacctc	tgttcccttg	8880
ggggcagcag	tggaagaggc	agctgctttt	gagcttgtcc	ctgtccccag	agaagcctga	8940
ggccttcagt	gccgttgcca	gggccgaggc	tgaggagcct	acagcgtgtg	ttcaggactg	9000
agggccaggg	acgggcacag	gctccctgcc	tggggtccaa	gcctagatcg	ctcgctcccc	9060
acccgcacca	aagcccaggc	aaagggtgct	tcagccactt	cctgttgcag	gctcagacca	9120
agtcccctgg	cacccacgcg	gctgcagctc	ctcctgtgcg	ctgcagccac	gctggcccca	9180
ccctctgcag	cctccaatcc	tgagcccctg	agggaggatg	gggaagcagc	tggtctggcc	9240
acccctgccc	tcccttagac	ctccagagcc	cccagtgtag	ccacagagga	tgctgttggc	9300
ttcagcccca	agaagacgcc	gcttcctcca	gagggctaag	taagtgggaa	tececetece	9360
tacttgtcct	gggctccagg	cagggcccct	ggtgtaaggc	ctgggctgga	agccgaccca	9420
cctaggtcca	ggctctgggg	cagaactgaa	actccttggt	tactgtcggc	tgcagctggg	9480
agcaggccac	tccaaagctg	tgggtccttc	caggacagtc	tccccatgag	gccggtcctc	9540
cacctgctgt	ttcttcacac	ctggtggcca	gggatgtggc	cctgggtaga	acgatgattc	9600
tccactcctg	tcattatgga	agccaccgct	gtctcccagc	ccagccagcc	acctgggctg	9660
cagagcaccc	ctttcatgcc	ctccgggtgc	ctccccttc	tcctgcccca	gcctggcttt	9720
gtcctaccct	gctctcaggg	aggggtaccc	tggagtgggg	ccagggcatg	gctctccccc	9780
gagggagttc	ctctctggct	gtccccaggg	cagctctgca	cagcctcagt	acctggcgca	9840
cctcccttga	catccttctt	agggacagtc	aggcactctg	tgtggggcac	tcaagagagc	9900
caggcccgtc	agcctctagc	tcctgccaga	atgcaggcct	gaggggtgag	gggcggggca	9960
ggggcagggg	cagggacagg	aactccggct	tgctctccat	ccgcaaaggt	tcactgaggc	10020
cccgagcccc	agccactgag	ccaccaagtc	agcctgggcc	aggcctgggt	gccctgtctg	10080
caatggaggc	agagacgggg	tctcggggca	gttctgagga	tgctgggtgc	acagcggggg	10140
cctcgccggc	aggaatcact	tatgctctct	cctgggccaa	gctttgtgga	tgcccagcct	10200
ggggccgcgg	ggagctggca	ggtcagtggc	agacactggt	gggcagacct	agtgtctggt	10260
agaacaggca	tcaaggaagt	ggtgaccgga	gggaagccaa	gtgcactcaa	accctcgggt	10320
	cgccgggtct					10380
	cgtgagcgag					10440
	ggatggggac					10500
	aggtatgcgg					10560
	cccctgtgac					10620
	accaggcgtg					10680
	gcactccttt					10740
	ccccctcac					10800
	cccctgctgt					10860
	accgccacca					10920
	aggcctccct					10980
	tccccttta					11040
	tcttaaaggg					11100
	ctagttacag					11160
	gctgtggaga					11220
acccaggicc	cagtctttcc	Laccigeete	teteetagat	Lytyyeeett	Lygayeetgg	11280

ttcttctgtc cctgtgtgac cgacacatag cacccaaaca gtggcagagc gggacggacc 11340 11400 ccctagcctg ttctctgtgt gggtctgtac cctgacccag acatgccccc ccacagcagg acccaggggg gcacatgtgt gcctgcgggt tcactggggc acccgcattt ggtttatttt 11460 11520 attttttaga gagagggtct tgctgtgtca cccagctgga gtgcagtggt gtaatcatag cacactgcag cetteaacte etgggeteaa gegateetee etececagee teeetagtag 11580 11640 ctgggagtac aggacccact gtatcctggc taatttttta ataatttttt aagagatggg 11700 gtcttactgt gttgcccagg ctggcctcaa acctctggcc tcaagtgaac ctcccacctt 11760 cgcctcctga agtgctgaga ttacagcatg agccaccatg cccatcccag actgacattt ctatatttgt tcatcctggc tgggcagggc tgctggtccc cacccaccgg gatgcttggc 11820 tgggaaaaag ccgggaatgt aggtctaacc ctggcctgtg ttgtggcacc tacagcctgg 11880 11940 cattcctccc catctgccct tcaaggcccc accaaccagg cctccttggt agcctctagt gaggaaacag gcgaaccgtg gctttgatga ccctgcacac ctggggattc tcctctattt 12000 12060 ttctttttct tttttttt tttggagaca gagtctcact ctgtcgccag gctggagtgc 12120 agtggcacaa ttttggctca ctgcaacctc tgcctcccag gttcaagcga ttcttctgcc 12180 teagecteec gagtagetgg gattacaggt geccaccacc atgeetgget agtttttgta 12240 tttttagtgg agactgggtt ttgccatgtt ggccaggctg gtctcagact cctgacccca 12300 agtgatetge ceacetegge etcecaaagt getgggatta caggtgtgag ceacegettt 12360 gggaggccga ggtgggcgga tcacgaggtc aagagctcaa gaccatcctg gccaagatgg tgaaacccca tctctactaa aaatacaaaa aattagctgg gcatggtggt gtgtgcctgt 12420 12480 agtcccagct actcaggagg ctgaggcagg aggatcactt gaacctggaa ggcagaggtt 12540 gcagtgagcc gagatcgagc cactgcactg cagcctggcg acagagcaag actccgtctc aaaaaacaaa caaaaagaaa acttgttcta attcttacaa aggtgcctgt agccgaggca 12600 12660 gcggcccagg tgaggtggag gagggcggga gtggacgtct cagcccggcc cctctcctgc aggtgttgtg actgcagtgc ctccctgtcg caccagtact atgagaagga tgggcagctc 12720 12780 ttctgcaaga aggactactg ggcccgctat ggcgagtcct gccatgggtg ctctgagcaa atcaccaagg gactggttat ggtgagegec cectgeettg cacacteace tggggtgggg 12840 gtatccaagc agaccccatg ctccaggtct ctctcccatc attgtctctc ctggtctcct 12900 12960 ttttgctggt ctttggagct gctttctgag cctgactgtc tgtctgtatc cctcagcgcc cccatctatg gagccagctc tgtccaggag ctcagcagct ggccagccgg gtccctgcag 13020 13080 ttgttttttt ggtgacaccc ttggaagagg cctaggggag gatctgtggg ggttgttggg 13140 tetgetgage tgggetgtte cetecteace ceegeaceag gtggetgggg agetgaagta 13200 ccaccccgag tgtttcatct gcctcacgtg tgggaccttt atcggtgacg gggacaccta 13260 cacgctggtg gagcactcca agctgtactg gtgagtgcct tggcccctcc ctgagcctag 13320 gaggeecace tgtgteacag atetgeaagg gtgetgaete teecacacee gggeeteetg ccctttccca tggggtgagg tttgttgggg caaatgttca tatctccttt cccatcccgg 13380 catggaaaca agtgagaaat aacacacaga agtcagtgtg aaaaagcctc agacggccag 13440 13500 gcatgctggc tcacgcctgt aaacccagca ctttgggatt ccgaggtggg tggatccctt 13560 gaggetagga gttcaagace ageetggeea acatggtgga acceeatete tattaaaaat acaaaaatta accaggtgtg gtggcgggtg cctgtaatcc cagctactca ggaggctgag 13620 13680 gcaggagact ctcttgaacc tgggaggtgg aagttgcagt gagccaagat tgcaccactg 13740 ccctccagcc taggcaacag agcaagactc tgtctcaaaa cagaaaacct cagacgtcag 13800 ctttcttact ggccatgact gcagcatggt gctggcacaa accaccagag gtggggtgga tgccacaagt taaggacacc atccccagca taactgctcc ctctttagac accagccaca 13860 13920 agttcagggg tccccaaccc actcacactt ctgaccgact ggctacaaat tcagggactc 13980 ccaagaccct gccaagtttg atcgtttgct aacagactca cagaactcag gaaatcctcc atttttatcc cagttttatt atgaaggaca cagctcaggt ccgaccaaat gaagaagcat 14040 ctcccctccc tcccctagca catcaatgtg atcaccaacc aggaagcttc actgagcttc 14100

14160 agcagccaga gtttttattg ggatttcatt acatcgtcat gactgattga gtcattggcc gtatgatcaa gcttagtctc tagcccccgt tcttggaggt caggctggat gaaagctgca 14220 14280 accetettea aateacatga tgtatetttg eggggetgag teateteatt agtateaact caggaatagt ctgaggggct catgaataac aaagataccc cattccaagg acttagagtc 14340 14400 tccctcccag gaatcaggac aaaacccaga cagattcttt cttatacaac actgatcaag ctggattaga ggacaacgtg gcttgatccc agatgggctt ttaatgactt cctcctgaac 14460 tggatttate ctcaggcctt gtcctggccg ccttacagga tcacagcgag tagacagacc 14520 14580 cgaatgactc agagggacga gggctggctg ggcacgcaca gttcctgctc ccagttccat 14640 aggaagagtg aaagaaaaga aagctggcca ggtgcagtgg ctcaccccta taatcccagc 14700 actttgggag gccaaggcag gcagatcacc tgaggtctgg agtttgaggc cagcctggcc 14760 aacatggtga aaccgtctct actaaaaata agaaattagc caggcatggt ggtgcttgcc cgtaatccca gctactcagg aggctgaggc aggagaatcg cttgaaccca ggaggcggag 14820 14880 gttacagtga gccaagatca caccactgca cttttggaca attgctagct ttccttttct tttgagacag agtcttgctt tgtcacccag gctggggtgc agtgttgtaa tcaacagagt 14940 15000 gagactecat etcaaaaaaa aaaaaaaaaa ggaagggatt gggggaagag eetggggetg ggggctgcag agatgctgaa attgatgacg cccttgacac tcttttcttc ccaccccggc 15060 15120 ggctcttgca gcgggcactg ctactaccag actgtggtga cccccgtcat cgagcagatc 15180 etgeetgaet eecetggete eeacetgeee cacacegtea eeetggtgte cateecagee 15240 tcatctcatg gcaagcgtgg actttcagtc tccattgacc ccccgcacgg cccaccgggc tgtggcaccg agcactcaca caccgtecge gtecaggggt gagtggeegg cetgeegagg 15300 ctgccgtcgg tgtggctatg gctgttgatg tgggtggcag agtctggcac tgggggccct 15360 15420 gaaaatgaat gggcgagtgt ttgggtacag atggggccca gttctgacaa cctggtttgc 15480 cagatttctg gcccagtcat tcctctgaat accattacaa atgccagata caataaaaag 15540 acattttcaa ccgggcatgg tggcccacac ctgtaatctc agcacttcgg gaggccgaag tgggtggatc acctgaggtc aggagttcga gaccagcctg ggcaatgtgg tgaaaccccg 15600 15660 tctctactaa aaatacaaac gtagccaggc atggtagtgt gtgcctatag tgccagctgc ttgggaggct gaggcaggag aatcacttga acccaggagg tggaggtttc agtgagcccc 15720 15780 gactgccatt gcactccagg ctgggcaaca agagtgtaac tctgtatcaa aaaaataaaa ataaaaaaaa cacactcaaa aaataaaaag acattttctt tagtccatgt ctgatccaac 15840 15900 aagaaagagg aggaaccaag tcaagaatga gtgaagaagc tgggcgcagt aactcacacc 15960 tgtaatctca gcactttggg aggccaaagt gagaggatca cttaaggcca gaagtttgag 16020 accagettgg geaacatage gagaeetgea tgtetacaaa aaaaaaaaaa aaaattaaaa 16080 attagccagg catggtgaaa tcactgaaca cataaaggct gggcatggtt gctcacactt ataatcgaaa cactttggga ggctgagatg ggaggatcac ttgaggccag gagttcgaaa 16140 16200 ccagcctggg aaacattgta gtcacagcta cttgggaggc tgaggcagaa ggatctcttg 16260 agcccaggaa gtggctacag tgagctataa ttgcacgact gcactctagg ctgggcaatg gagcaaaacc ctgtctcaaa aaaatggggc agggctgata aagattagat tactgtgtga 16320 16380 etttgagcag etgetttete tetaggettt gggggtetgt ttgaacaatg agggagttgg atacettgga getttetaag atttetgtgg egeetttatt gaeacettga gaagtageat 16440 gcagtgtttc tacttttggg caattggtca cttctttttt tttgagacag tctcactctg 16500 16560 tegeceagte tggggtgeag tggtgtgata eeageteaet geaaceteea eecacaaggt 16620 tcaagcaatt cttgcacctc agccccctga gtagctggga ctacaggtga ccacatgtgg ctaatttttg tatttttagt aaagacaggg tttcaccatg ttggccaggc tcgtttcaaa 16680 ctcctgggct caagtgatcc tcccttctcg gcctcccaaa gtgccgggat tacaggtgtg 16740 agccaccgtg cccggcccaa gtgctagctt tctctctctc ttttttttt tttcgagacg 16800 gagteteget etgtegeeca ggetggagtg cagtggtgtg gteteggete aetgcaagee 16860 16920 ecgeeteetg ggtteacgee atteteetge etcageetee egagtagetg ggaetacagg 16980 cacctgccac catgcccggc taattttttt tttatattta gtagagacag ggtttcacca

tattaggcag gatggteteg ateteetgae etegtgatee geeegteteg geeteecaaa 17040 17100 gtgctgcgat tacgggcatg agccaccacg cccggcccta ccaagtgcta gctttcattt gacgcagtga atgtttcttg tacacctggc aggtgcctgg cactgcatag gcactgttga 17160 17220 gatgtgaagg tggccctggg gacagaaaat tatactgggc ttgactgtgt gtctccatcc 17280 cttgacatca gccaagccag cagctgcttt acatacatga tgagcagaca gctgcttgaa agagatgagg aaactcccag accaacggct cttaccagag ggccaaggga ggtccccaca 17340 17400 gagtcagagg ctgcagctgg tccctgaaat ccaggcagaa ttttagaaat gaagacagtc agctgggtgc agcggctcat gcctgttatc tcagccactt cggagggctg aggtgagagg 17460 attgcttgag cccaggaggt ggaggctgca gcaagctatg atgacaccat gcattccagc 17520 ttgggcgaca gagcgagacc ctatctctaa aataaaaatg aagaagacag ttaatgacgt 17580 17640 ctcctcctg tctgcctcac tgggtaagca ttcgcccagc caacatctgg aacatcccag 17700 ttctgcaaag agccacaccc ttcccagaaa gagcccaact tgccaaagat ttacttattt 17760 gttttaaact ggttttagtt gaccgctttt cattttgtgt atagcagcgt tttaaggaag gtctaattta tccaggccac ctgctgcttt agcaaaccaa gggagaggat gtgagattct 17820 aaggaattta catatgtatg tcatatatat atatatat agacacacaa tttttttttg 17880 17940 agacagggtc ttgctctgtc atacaggctg gagtgcagtg gccaatcata gctcactata 18000 gcctcagatg cctgtgctca agcaatccac tcacctcggc ctcctgagta gtgagactac aggcacacac caccacaccc agctaatttt ttaatttttt gtagagactg agtcttgctg 18060 tgtegeecag getagtettg aacteetggg etcaageaat eetceeacat tggetteeca 18120 18180 aagtgctagg attacaagcg tgagccacta tgcctggctt atttttaagg ttatatgcat 18240 gcaaagcctg tatcaatgaa aatattttct ttggtttttt tcaacttttc atcttcgcat 18300 tttgcagatt tatagaaaat ttgctaaaat aataagtcca ttgaatacat acacaccctt 18360 caccaaggtt caccaattcg taactgccat atttgggagt tatatgtgtg tctctctata 18420 tatacatata tggatacaga tacatataca tgtttagtga cttgtttata tttgtacata 18480 catgtacatg ttgttattta ttgatcgttt gggagtaagt tgcagggatc attgactccc ccacaattat gctagatatt ctcaaaagaa ggaccttctc ttttttttt ttttttttt 18540 18600 ttttttggag acagggtatc actgtcattg aggctggagt gcagtgatgc gatcacagct 18660 cactgcagcc tcaacctccc aggctcaagt gatcctccca cctctgcctc ccaagtagct gggactacag gcacgggcca ccacgcctgg ctaggcattc tgttatgtaa ttatccaatt 18720 18780 gtatettata gtteagtgat eacattttgg aaatgtaaca ttgataceat tatetaatae 18840 acagaccata ttcaaatttt gcctattgtc tctatactga actactgaac tgtcctttat 18900 agcaatctcc ccctcatcca cagtccagtc catgatcaac attgcattta atcgtcatgt 18960 gtcatcagta tetttttttt ttttttttt gagaeggaat tttgetettg ttgeecaggt tggagcgcaa tggcgcaatc ttggcttatt gcaacctccg cctttgggct taagtgattc 19020 19080 teetgeetea geeteetaag tagetgagat tacaggegtg caccattatg catgeetaat ttttgtattt ttattagaga cggggtttta ccatgttgcc ctggctggtc ttgaactcct 19140 19200 gacctcaaat gatccaccca cctcagcctc ccaaaatgct gggtttacag gcatgagcca ctgcgtctgg ccatttcctc agcctttcat tgcccttcat gatcttgaca tttttgaagt 19260 19320 gtacaggcca gtcattaaag taaaatgttt ttcctttttt ttttttttt ttttaaaaag 19380 agacagggtc tcactgtgtt gcccaggctg gtctcagact cctaggctca agtgatcctc ccgcctcagc ttcccaaagt gctgggatta caggcgtgag ccatcgtacc tgccctcgca 19440 19500 tttgggtttg actgatgttt cctcttaggg agacaggctc tgcaggtttg gcctgatact 19560 gcataagtga teetetgtee tteegagtgg atettgeeag gagacatatg atgteagtgt 19620 19680 tecetttgte ateaataaae eatttgtgag atttgagtet gtaaatatee tgtteecaaa aaccettece caaatgattt gageatetat tgatgattet tgeetgtage gattattaet 19740 agggtggcta ccaaatgctg aatttctaac tctgttcttc cttctgcatt tgttactgta 19800

	tctcccccat					19860
	actctgttgc					19920
	atgggctcaa					19980
	accatgcctg					20040
	tggtctcgaa					20100
	tacaggagtg					20160
gagatggggt	cttgctatgc	tgcccaggct	ggtctcaaac	ccctagtctc	aagcaatcct	20220
cccaccttgg	cctcccaaag	tgctgggatt	ccaggcatga	gccaccacac	ctggccctgt	20280
ttttcttaaa	gttctcagtc	tcctctctgc	cttaccccca	tccccttttc	catctccagg	20340
acctagggca	gagacaaagt	gagcattccc	taaaaagctt	ttatgaggca	aaatgaaaac	20400
cagctcacgc	ctataatccc	agcactttgg	gaggccaagg	tgggtggatt	acctgaggtc	20460
aggagttcaa	gaccagcctg	accaacatag	agaaacccca	tctgtactaa	aaatacaaaa	20520
ttagccaggc	atggtggcac	atgcctgtaa	tcccagctac	tcaggagcct	gaggcaagag	20580
aatcacttga	acctgggagg	cggaagttgc	aatgagccga	gatcactcca	ttgcactcca	20640
gcctgggcaa	caagagcaaa	actctgtctc	aaaaaaaaa	aagaaaagaa	aagaaaacca	20700
ggtccctaac	accgaagagt	taaaagaaat	aagtaaattt	ggcaaattgg	tctttttgtg	20760
agttagctta	taggcaactg	atcgagggtc	tctttcccgt	cttcaccctg	caattgtggc	20820
tcagggcaag	ctgccagctc	cctcctgcca	atgcaggagc	aatagagctt	ggcctcctct	20880
tgcagggcga	gtttgggagt	cagatatgaa	gccactaatc	cgggaccttt	ttgggaccca	20940
aggcactcat	ctgccccaag	cataccaggc	aggccaggtg	caatgactca	tgtctgtaat	21000
cctagcactt	tgtttttgcg	acggagtctc	gctctgtcca	cccaggctgg	agtgcagtgg	21060
cagaatcttg	actcactgca	acctccacct	cccaggttca	agcaattcct	gcctcagcct	21120
cccaagtagc	taggactaca	ggcgcccact	gccacgctcg	gctaattttt	gtattttcag	21180
	gtttcaccat					21240
catccacctt	ggcctcccca	actgttggga	ttacaggtgt	gagccactgc	gcccggccag	21300
	ttgggaggct					21360
cctgggaaat	gtggtgtaac	cccgtctcta	ctaaaaatac	aaaaaaatt	agctgggtgt	21420
ggtggtgtgc	acctgtaatc	ccagctactc	aggaggctga	ggtacgagaa	tcgcttgaac	21480
tcaggaggca	gaggctgcag	tgagctgaga	ttgtgccatt	gcactccagc	ctgggtaaca	21540
gagtgagatt	ctgtctccaa	aaaaaaaaa	aaaaaaaatt	cgagaccaaa	catacctggg	21600
atttggaagg	atagatctgt	tcccccaggg	tggagacaat	ggtccattga	atgggaacag	21660
ctgagcatct	tgtgtgggtg	gccagtgcct	acaagcgtgc	cacctttctc	cagctcacac	21720
ctgtggcaga	catcagtaat	tgattacaga	attcctcccc	tgaaaccaga	actcggtgtt	21780
ctggccatct	gctacttccc	agtcacacga	agtagaatcc	tccacctgct	caccctggat	21840
ctggtgccct	tcgccttggt	ttcctgttgg	ggctctgagg	gacaggtggg	cactggcctg	21900
acccctgcct	tacccacaga	gtggatccgg	gctgcatgag	cccagatgtg	aagaattcca	21960
tccacgtcgg	agaccggatc	ttggaaatca	atggcacgcc	catccgaaat	gtgcccctgg	22020
acgaggtacg	gtcctgagtc	tgtggggcag	gacgggaggt	agtgccttca	tgcctagccc	22080
cctccccact	ccacccccat	tcacatgcct	gctgtcccca	gattgacctg	ctgattcagg	22140
aaaccagccg	cctgctccag	ctgaccctcg	agcatgaccc	tcacgataca	ctgggccacg	22200
ggctggggcc	tgagaccagc	cccctgagct	ctccggctta	tactcccagc	ggggaggcgg	22260
gcagctctgc	ccggcagaaa	cctgtcttgt	aagtcagcct	gctcctcggt	tcagctgggt	22320
gctttcactc	ctgctggggc	tcaggggctg	tgggacctag	gtcggggagc	cagccctgca	22380
caaatgcagc	ccaggcttga	gccagggagg	tggaggctgc	agtaagctgt	catcacacca	22440
ctgctctcca	gcttgggtga	caaaacaaga	cccactctca	aaaaaaaga	ggaaacacac	22500
attttttaaa	aagccgggga	cggggccagg	cgtggtggct	catgcctgta	atcccagcac	22560
tttgggaggc	cgaggcaggt	ggatcacctg	aggtcaggag	ttcaagacca	gcctggccaa	22620
catgggaaac	ctcatcttta	ctgaaaatac	aaaaattagc	cgggcttggt	ggcaggtgcc	22680

tgtagtccca	gctactcagg	aggctgaggc	agatgaatca	cttgaaccca	ggagatggag	22740
	gccaaggtca					22800
tctcaaaaaa	aaagaggatg	acagagcagg	atctgagggg	ttgaggggag	ctgggggctg	22860
ccactagagc	caggataggc	cgagacactg	ggatgggcag	cctttggact	gtcccaggcg	22920
ggccctccca	aagcaggggg	tgattgcata	gactggcatg	gacaggggca	tgcaggcagg	22980
aggaggaagg	ggcagggcct	tggccgggtg	ctacctgtcc	cccggtggca	cttggcacca	23040
tgtgtgcccc	ccaggaggag	ctgcagcatc	gacaggtctc	cgggcgctgg	ctcactgggc	23100
tccccggcct	cccagcgcaa	ggacctgggt	cgctctgagt	ccctccgcgt	agtctgccgg	23160
ccacaccgca	tcttccggcc	gtcggacctc	atccacgggg	aggtgctggg	caagggctgc	23220
ttcggccagg	ctatcaaggt	acagagcatg	ccagggtctc	aggggacagt	ctgggtggga	23280
cccctccatc	ctccttcctt	cccagtctat	ggaaacacag	tggaaggggt	atctggcttc	23340
cagactccct	ggccagtgcc	ctctcctccc	ttggcctcct	ggagctaatt	aggaacaggg	23400
	aggtagactg					23460
	tagtttatcc					23520
	aggaattcaa					23580
	agtggtgcat					23640
	ggagttcaag					23700
	caagacccca					23760
	ggtatttggg					23820
	cagtcctggg					23880
	cacacctctg					23940
	aaggagctga					24000
	cggaatgccc					24060
	ggtcggaaaa					24120 24180
	cacgcctgta					24240
	gggcaacata gtgcacctgt					24300
	gttggaggct					24360
	gaccctgtgt					24420
	gtaatcccag					24480
	ctaccctggc					24540
	tgatggtggt					24600
	gaactcagga					24660
	gacagagtga					24720
	ggcaggggac					24780
	ggacgccaga					24840
	ccgcctacag					24900
	acacagagcc					24960
cgatgcctgg	aacaccccaa	cgtgctcaag	ttcatcgggg	tgctctacaa	ggacaagagg	25020
ctcaacttca	tcactgagta	catcaagggc	ggcacgctcc	ggggcatcat	caagagcatg	25080
gtgagtcctg	ggcagagcca	gccacccccg	ctgtgcggcc	ccgggcaaag	cagctccctc	25140
tgtgagcctc	agtctcatct	cttcaatggg	gggaagccac	aggggtctca	aaggccctct	25200
gaaccctgat	tcctaatcaa	aaaggggagc	gactgactcc	atctaaagct	aggaaaggcc	25260
aggtacaatg	gtgcacacct	gttattctgg	cactttggga	gcccaaggca	agaggatcac	25320
tcgaggccag	gaattcaagg	ctgcagtgag	ctgtgatctc	accactgcac	tccagcctgg	25380
accacacagc	aagaccctat	ctcaaaaact	aaaataaaat	tcagagcttt	ccttaaggat	25440
ttgaataaaa	ttacaaatcc	atctttagaa	ataaagtgct	caggccaggt	gcagtggctc	25500

25560 atgectataa teteageaet tteagagget gaggeeagea gateaeetga ggteaggagt 25620 ccaaqaccaq cctggccaac atggtgaaac cccgtctcta ctaaaaatac aaaaattagc 25680 tgggcctggt ggcaggcacc tgtaatccca gcactttggg agactgaggt tggcagatca 25740 cctgaggtca ggagttcgag accatcctgg taacccgtct ctactaaaaa tacaaaaaat 25800 tagccgggca aggtggcagg tgcctgtagt cccagctact cgggagactg aagcaggaga 25860 atggcgttga acccaggggg cagagcctgc agtgagccaa gatcgcacca ctgcgctcta 25920 qcctgggtga cagcgagatt ccgtctcaaa aaaaaagcac ttggaggaag cctcacagag 25980 tectgtgetg gaccacacce tggggateca gteetggeet ceagececat ttetgtacca ccctgagacc atgggatett cctcaggttg gattacettg tatccaaggt gtggacccta 26040 tgggctcctg ctaggtgtaa cttgacacaa cgggttccgt tgtcaggtgc aatttagaaa 26100 26160 ctctgggcta ggccaagcgc agtggctcac acctgaattc ccaaactttg gaaggccgag gcaggaggt cactagaggt caggaggtca agaccagctt ggacaacata atgagatccc 26220 26280 aatcccatct ctacaaaaaa aattaaaaaa ttagccaaat gtggtgacac atgcctgtgg 26340 ttccagctcc acaggaggct gaggcagaag gatcacttga gcacaggagg tcgaggctgc 26400 actccaqcct gggtgataga gtgagaccct gtctcaataa aaaataaaga tctccaaggg gatgaggttt gagaatgagg cgtctccccc aaatgatttg agcccaaagc cccgttctcc 26460 26520 tggcatggct cagtgctgcc actgcgcagg tgaccttgct gggcccttct acctcttacc 26580 tgtctgtgaa agtaggttct aattttttaa aaacctagaa agatgagttt tttgtttttg tttttgtttt tcccgagatg gagttttgct cttactgtcc agcctgaagt gcaatggcgt 26640 26700 gatctcggct cactgcaacc tccacctccc aggttcaatc gattctgcct cagcctcccg 26760 agtagctggg attacaggag cccaccacca cacccggcta atttttgcgt ttttagtaga 26820 gacagggttt caccatgttg gtcaggctgg tctcaaactc ctgacctcgt gatccaacca 26880 ctctgacctc ccaaagtgtt gggattacag gcgtgagcca ccacacctga cagaaagatg 26940 agattttata gaaaataaat atagcttgtt ttctcagagg aggcagattg ggagctatag 27000 aggaatatcc ctgcttagag tttgaaatca gttctgttag gaaataatgt ttgtaggggc cgggtgcggt ggctcacgcc tgtaatgcca gcactttggg aggctgaggc aggtggatca 27060 cttgaggtta ggagtttgag aacagcctgg ccaacatggt gaaaccctgt ctctactaaa 27120 27180 actacaaaaa ttagctgggt ttggtggtgg acacctgtaa tcccagctac ttgggaggct 27240 gaggegagag aattgettga ggeegggtge agtggeteat geetgtaate eeaacaetgg 27300 gaggccaagg tgggcagatc acctgaggta aggagttcaa gaccagcctg accaacatgg 27360 tgaaaccccg tctctactaa aaatacaaaa aattagctgg gtgtggtggc gcatgcccat 27420 agtcccagct actcaggagg ctgagacaca agaatcactt gagccccgga ggcgaaggtt 27480 gtagggaget gagatggtae caetgeaete caecetgggt gacagagtga gaetecatet aaagaaaaaa aaaaaaggaa ataatgtctg tgagctgtgt tgactcatac tccttagaag 27540 27600 cagacagttg tgggtgcccg aagaaatcgg ggtgttgggg agcccaggga ccctctagga 27660 egettgeete tteetgeete tgteteatge aaccateeet gecategggg ceeceacegg 27720 ccccaccctg gccattcttt ctccatccca ggacagccag tacccatgga gccagagagt 27780 gagetttgee aaggaeateg eateagggat ggtgagtgag eegggtgete tageteeatt 27840 cataatccca ccaggaattt gcaaacagaa cccacaaaga agctttgaaa gagggcagag 27900 ggggtcgatg ggagagtggg aagaatcgtc ccgactggcc tgattggggt gggagcagag 27960 ggagttcctg gggagccagg atgggctggg gtccctctgc acagctgccc cctgactccc 28020 gtgtccccgt ccctaggcct acctccactc catgaacatc atccaccgag acctcaactc ccacaactgc ctggtccgcg aggtgagtac cagggcccca cgtggctggg tgtcaggaga 28080 cagcaggage ccatecaace ecageeteag ggeetteeca gaactggagg eccetecatg 28140 ttgcctccat gacttcaatt tgaggtgggg gtggggggca gcagcccgtg gggaagagcg 28200 28260 cagggtcagg aggcagacag acctgggttt gagtcctgtc tctgccactg actcatggtg gaccatcaga gtcccaggct ggtaggaggg tctcataaat caatgaagga gaaagtgaca 28320 28380 tgtaagetae aaaggaeeag gaeegtggte tteatagage acageeeatg geagagtgge

catgggctac	accagacagc	accagcatct	gggggccaca	gagtggggc	ataggcgtat	28440
gggctggagt	ggtcagggca	ggcttcctga	aagaggaggc	ttggccagac	acagtggctc	28500
acacctgtaa	tcccagcact	ttgggaggcc	gaggcaggcg	gatcacgagg	tcaggagatc	28560
gagaccgtcc	tggctaacat	gggcactgtg	gctcacacct	acaatcccaa	cactttggga	28620
ggccgaggtg	ggtggatcac	ttgaagccag	gagttcaaga	ccagcctggc	caacatggct	28680
aacacggtga	aaccccatct	ctactaaaaa	tataaaaaat	tagccgggcg	tggtggcagg	28740
tgcctgtagt	cccaactact	tgggaggctg	aagcaggaga	atggtgtgaa	cccgggaggc	28800
ggaacttgca	gtgagccaag	atcgcgccac	cgcactccag	cctgggtgac	agagcgagac	28860
tccatctcaa	aaaaaaaag	aggaggcttt	aggtggatat	ttaagcaggg	gacgggcagg	28920
caaagagccc	agtgtctaag	gattgtcaag	ggaggagagc	ccggttctcc	accaaaagca	28980
caggagcgag	taaccatgcc	catctggaga	ggtggtgtat	tcgtgtcctg	gggctgccat	29040
catgaagtac	tgtgaaccag	atggctcaaa	acaacagaaa	tgtgctgggc	acagtggctc	29100
acacctaaaa	tcccagcaat	ttgggaggcc	aaggcaggtg	gattgcttga	gctcaggagt	29160
ttgagaccag	cctgggcaac	attacgaaag	cccatctctg	ccaaaaatac	aaaacggaat	29220
agccagccgt	ggtggcataa	gcctatggtc	ccaactacct	gggaggctga	ggtgggagga	29280
tcacttgagc	ctgggaggta	gaggttgcag	tgagccaaga	ttgtgctact	ctactccagc	29340
ctgggagaca	gagccagacc	ctgtctcaaa	aaaacaaaac	aaaacaaggc	caggcactgt	29400
ggctcacgcc	tgtaatccca	gcactttggg	aggccgaagt	gggtggatca	cttgaagcca	29460
ggagttcaag	accagcctgg	ccaacatggc	aaaaccctgt	ttctactaaa	aattcaaaaa	29520
ttagcaggca	tggtggcgca	tgcctgtaat	cccagctact	cgggaggctg	aggcaggaga	29580
attgcttgaa	cccaggaggc	agaggttgta	gtgagctgag	attatgccac	tgcactccag	29640
cctgggtgat	agagtcagac	accgtctcaa	aaaaaaaaa	gcatcacatg	gcaagagggg	29700
ctgacaagag	acccccaaac	tgaccattat	acagacccac	tcttgtgata	actaacctgg	29760
tccctcaata	acccattaat	ctgttaattc	atacagagcc	ctcatgaccc	aatcacctct	29820
tacaggccct	gcctcttaat	accgttagag	tcaggccagg	catggtgaca	tgggcctgta	29880
gtcccagcta	gttggaaggc	taggtgggag	gatcccttga	gtccaggagg	taaatgttac	29940
agtgagctct	gattgtgtca	ctgcactcca	gcctgggcaa	cagagcgagc	ccctgttttt	30000
aaaacagcaa	caagccaggc	acagtggctc	acgcctgtaa	tcccaacact	ttgggagact	30060
gaggcaggca	gatcacttga	ggtcaggagt	tcaagaccag	cctcaccaac	acagtgagac	30120
ccctctctac	taaaaataca	aaaattagct	gggcgtagtg	gtgggtgcct	gtagtctcag	30180
ctactcatga	gactgaggca	gaattgcttg	aacccgggag	gtggaggttg	ctgtgagccg	30240
agatcacgtc	actgcactcc	agcaacagag	tgggactcca	tctcaaaaaa	aataaaaaat	30300
aacagagatc	tgtgttggct	tacacctgta	atcccagcac	tttgggagtc	caaggtgggc	30360
agattgcttg	agcccaggag	tttgagacca	gccaggcaac	atggcaaaaa	aataaaaaaa	30420
tttgtctcta	caaaaaaatt	aaaaaattag	ctggcatggt	ggtgagtatc	tatagtacca	30480
	aggtggaggt					30540
gctgtgttcg	tgccactgca	ctccagcctg	ggccacggga	gggagactct	gcctcaaaaa	30600
aaaaaaaaa	aaatcaaacc	cgaaaagcaa	aaaacataga	cctcacctgc	ttattgggaa	30660
tattcaagat	aaaattaggc	caggcacggt	ggctcacgcc	tgtaatccca	gcactttggg	30720
aggccgacgt	gggcggatca	cgaggtcagg	agatcgagac	catcctggct	aacacggtga	30780
aaccccgtct	ctactaaaaa	tacaaaaaat	tagctgggca	tggtggcagg	cgcctgtagt	30840
cccagctact	tgggaggctg	aggcaggaga	atggcgtgaa	cctgggaggc	agagcttgca	30900
	atcgtgccac					30960
	aaaaagataa					31020
	gctgaggcag					31080
	gaccctatct					31140
catgccaagc	acaggacctg	ggtctataat	caaaattcct	gtcttgatgg	gcacagtggc	31200

tcacacctgt	aatcccagca	ctttggtagg	ccacagtggg	tggatcacct	gagatcagga	31260
	tgcctagcca					31320
	gtggcaggcg					31380
	tgggaggcgg					31440
	agcaagactc					31500
	agcatcagtg					31560
	cgacggtctg					31620
	aagccacact					31680
cggatgggtt	tggggaagga	aggggtcccc	accctgtgcc	aatacagcgt	atcagaggta	31740
tgttctctgg	gctgtctacg	ggttggcttg	gggtcctggg	gaggggcagg	ccaagcgggc	31800
agtactagga	tcgggtccca	gcatgacccg	gcttcacctt	cccagaacaa	gaatgtggtg	31860
gtggctgact	tcgggctggc	gcgtctcatg	gtggacgaga	agactcagcc	tgagggcctg	31920
	agaagccaga					31980
	agatgatcaa					32040
aagccatggg	ggagcccagg	agagctgtaa	cctcccaagc	ccctggcccc	tcccagcctc	32100
cttggctctt	cagttaccct	gtgggtcctg	ttgctcctat	aacacactta	gtggcagcca	32160
ggcacggtgg	ctcacgcctg	taatcccagc	actttgggag	gctgaggtga	gtggatcacc	32220
tgaggtcagt	agttggagac	cagcctagcc	aacatggtga	aacccccatt	ctttactaaa	32280
aatacaaaaa	ttagctgggc	atggtggcgg	gtgcctgtaa	tcccagctac	tagggaagct	32340
gaggcaggag	aatcgcttga	acctgggagg	cagaggttgc	agtgagccga	gatcgcgcca	32400
ttgcactcca	gcctgggtga	cgagcgaaac	tccatctcaa	aaaataaata	aatagaagac	32460
acttagtggc	ttaaataaat	gatcatacag	ttctggagtc	tgaagtccag	cgtcagcctc	32520
accgggctga	aatcaaggcg	ccggtagggt	gagctccttc	tgcaggctcc	ggggcacctg	32580
tttcctgacc	ttttctggct	cgtggaggct	tcctcattcc	tcctgttgct	gccccctcct	32640
ctgtcttcag	ggctggctgc	aaagcatctt	ctcttctctg	atctctgcat	ccatccccgc	32700
atctctttcc	ctggctctaa	ccttcctcct	tttttttt	ttttttaaag	agggtctcgc	32760
tctgttactc	aggctggagt	gcagtggtgc	caccatagct	cactgcagcc	tcaaccttct	32820
gggctcaaac	tgtcatccca	ccccagcctc	ctgaatagct	gggaccacag	gcatgcaaca	32880
ccacacccag	ctaattttt	tatttttat	tttttattt	tttttgagac	agagtctcgc	32940
tgtgtctccc	aggctagagt	gcagtggcgt	gatctcagct	cactgcaagc	teegeeteet	33000
gggttcacgc	cattctcctg	cctcagcctc	ccgagtagct	gggactacag	gcgcccgcca	33060
acacgcctgg	ctaattttt	gtatttttag	tagaaacggg	gtttcaccgt	gttagccaag	33120
atggtgtcga	tctcctgacc	tcgtgatccg	cccgtctcgg	cctcccaaag	tgctgggatt	33180
acaggcgtga	gccaccgcgc	ctggccaatt	ttttaaattt	ttaatagaga	cgggggtatc	33240
actatgttgc	ccaggctggt	ctcaaactcc	tggcttcagg	cgatcctcct	gccttgacct	33300
	tgggattcca					33360
	acattgggcc					33420
tcaacttaat	cccatctgca	gagtccgatg	gaaggtggga	cgtatacaag	tcccagggat	33480
	tcatctttgg					33540
	tgctgtcaat					33600
	tgacacatga					33660
	ctagttaaat					33720
	gaagccaaag					33780
	ataccactgc					33840
	aggccaggca					33900
	attgcttgag					33960
	tgaaaataca					34020
gaggcaggag	aatcacttga	acccaggagc	agaggttaca	ttgggccaag	attgcaccac	34080

						24140
	cctgggcaac					34140
	ccagcacttt					34200
=	gtcaacatga					34260
ggcgtggttg	cacgcgtctg	tagtcccagc	tacccgggag	gctggggcag	gagaatgatg	34320
tgaacccagg	aggcggagct	tgcagtgagc	cgagatcgca	ccactgtact	ccagcctgac	34380
gacagagtgg	gactctgtgt	caaacacaca	cacacacaca	cacacacaca	cacacacaca	34440
cacacacaca	cacagagtta	acatagcccg	caaagaagac	tataaaacag	tcttagtggc	34500
cgggcgcagt	ggttcacgct	tgtaatccca	gcactttggg	aggccgaggc	aggtggatca	34560
tgaggtcagg	agtttgagac	cagcctggcc	aacacagtga	aaccccatct	ctactaaaaa	34620
	agctggacat					34680
	ttgcttgaac					34740
	agtgggcgac					34800
	ttagggatta					34860
	aaatgagaat					34920
	tttgttttt					34980
	tcggctcact					35040
						35100
	tagctgggac					
	acggggtttc					35160
	aagtgctggg					35220
	agtcttgcat					35280
=	cacctcctgg					35340
	acctgccacc					35400
tcaccatgtt	ggccaggctg	atcttgaact	cctgacctca	ggtgatccac	ccgcctcggc	35460
ctcccaaagt	gctgggatta	caggtgtgaa	ccactgtgcc	cggccatgta	ccgattattt	35520
ttaacatcat	taagtagctg	gtatcattcc	cattttacaa	taaggaaact	gaggctcaga	35580
gagtctgtgt	cagtttcctg	aggttgctgt	aataaattgt	tagaaacttg	attatttaaa	35640
acagcagaaa	atggtcaggc	acagtggctc	acacctgtaa	tcccagcact	ttgggaggcc	35700
gaggcgggca	gatcactgga	ggtcaggagt	tcgagaccag	cctggccaac	atggtgaaac	35760
accatctcta	ctaaaagtac	aaaaattagc	tgggcatggt	ggcaggcgcc	tgtaatccca	35820
gctactcggg	aaattgaggc	aggagaatcg	cttgaaccca	ggaggcagag	gttgcagtga	35880
	taccactgca					35940
-	cagaaattta					36000
	tccctccagg					36060
	tgcattcctg					36120
	ctcctcctct					36180
	ttggggccca					36240
	ctgcaaaaga					36300
	tcccttttgg					36360
	ctcgaactcc					36420
						36480
	gacctggtgg					36540
	tgcctcctgg					36600
	ttttggcatc					
	ccgcagctat					36660
	tccagggttg					36720
	ggctcagcat					36780
	ccccatggg					36840
cctcaaacca	cctggatggc	acccagatgc	ccaggctgag	ggccccctgg	agtaactgcc	36900

gggccttgta ctggacagat catcgggcgg gtgaacgcag accctgacta cctgccccgc 36960 37020 accatggact ttggcctcaa cgtgcgagga ttcctggacc gctactgccc cccaaactgc 37080 cccccgagct tctaccccat caccgtgcgc tgttgcgatc tggaccccga gaagaggtga 37140 gtggggtggg gccctggcct gggagacggt ggggccgatt cccgggacag ccagacccac 37200 cgttccccac ccacctgtca cccaggccat cctttgtgaa gctggaacac tggctggaga ccctccgcat gcacctggcc ggccacctgc cactgggccc acagctggag cagctggaca 37260 37320 gaggtttctg ggagacctac cggcgcggcg agagcggact gcctgcccac cctgaggtcc ccgactgagc cagggccact cagctgcccc tgtccccacc tctggagaat ccacccccac 37380 cagattecte egegggaggt ggeeeteage tgggacagtg gggacceagg etteteetea 37440 gagecaggee etgaettgee tteteceace eegtggaeeg etteeeetge ettetetetg 37500 ccgtggccca gagccggccc agctgcacac acacaccatg ctctcgccct gctgtaacct 37560 37620 ctgtcttggc agggctgtcc cctcttgctt ctccttgcat gagctggagg gcctgtgtga 37680 gttacgcccc tttccacacg ccgctgcccc agcaaccctg ttcacgctcc acctgtctgg 37740 tccatagctc cctggaggct gggccaggag gcagcctccg aaccatgccc catataacgc 37800 ttgggtgcgt gggagggcgc acatcagggc agaggccaag ttccaggtgt ctgtgttccc aggaaccaaa tggggagtct ggggcccgtt ttccccccag ggggtgtcta ggtagcaaca 37860 37920 ggtatcgagg actctccaaa cccccaaagc agagagaggg ctgatcccat ggggcggagg 37980 38040 ttaaagccac tttagtgaga agcaggtacc aagcctcagg gtgaaggggg tcccttgagg 38100 gagegtggag etgeggtgee etggeeggeg atggggagga geeggeteeg geagtgagag 38160 gataggcaca gtggaccggg caggtgtcca ccagcagctc agcccctgca gtcatctcag agccccttcc cgggcctctc ccccaaggct ccctgcccct cctcatgccc ctctgtcctc 38220 tgcgtttttt ctgtgtaatc tatttttaa gaagagtttg tattattttt tcatacggct 38280 38340 gcagcagcag ctgccagggg cttgggattt tatttttgtg gcgggcgggg gtgggagggc 38400 cattttgtca ctttgcctca gttgagcatc taggaagtat taaaactgtg aagctttctc 38460 agtgcacttt gaacctggaa aacaatccca acaggcccgt gggaccatga cttagggagg tgggacccac ccaccccat ccaggaaccg tgacgtccaa ggaaccaaac ccagacgcag 38520 38580 aacaataaaa taaatteegt acteeceace caggteetge gtggegatgt gtgtetgggg 38640 ccctggggaa atagtcaagg taagaggagt tagtcttccc tgaccagaag acaaggatga 38700 gtgtggtggc tcatgcctgt gatcccagca ctctgggagg ctgagacagg acgatccctt 38760 aagcccagga gttcaagacc agtctggaca acatagtgag atcctgtctc tacaaaaatt 38820 tttttttaat tagttgggca gaggccaggt gtggtggctc atgcctgtaa tcccagcact 38880 ttgggaggca gaggcgggtg gatcacctga agttaggagt tcaagaccag tctggccaac atggtgaaaa ctcgtctcta ctaaaaatac aaaaattagc cgggcgtggt ggcacatgcc 38940 39000 tgtagtccta gctacttggg agactgaggc aggagaatcg cttgaacccg aaaggcagag 39060 gttgcagtga gccgaggtgg tgccattcca ctccagcctg ggaaagagcg agactttgtc 39120 tccaaaaaaa aaaaaaaaaa aattggcagg ccaggcacag tggctcacac ctgtaatccc 39180 agccctctgg gaggccgagg caggaggatc tcctgaggtc aggagtttga gaacagcctg 39240 actgacatag tgaaacccca tctctactaa caatacaaaa ttagccaggt gtgatggcac 39300 atgcctgaaa tcccagctac ttggggggtt gaggcaggag aattgcttga acccaggagg cagaggttgc agtgagccga gatcgcacca ttgcacccca gcctgggcaa caagagcgaa 39360 39420 actocatoto aaaaaaaaaa aaaaaaatta gttgggcatg gtggcatgca cotatagtoo cagctactca ggaggctgag gtgggaggat cctttgagcc caagagatca aggctgcagt 39480 39540 gagecatgtt tgcaecactg cactecagee tgggcaacaa aacaagaete tgtetcaaaa 39600 aaaaaaaaa aaaaaaaaaa aggcagggat ggaggggga agagaacaca gcccagtttt 39660 aggtggaget gaggtggtgg cccagccagg acaagtgaag agtettcaga ggetgggttt 39720 ggagggccgt gcatattccg gaggtactgc tttcatactt aaatgttttc ttgtaaaact 39780 cacacctgta atcccagcac tttgggaggc caaggtgggc ggatcatctg aggtcggggg

ttcaagacca acctgaccaa catggagaaa ccccgtctac taaaaataca aaaaattagc 39840 39900 caggtgtggt gacacatgcc tgtaatccca gctactcggg aggctgaggt aggagaattg cttgaacctg ggaggcggaa gttgtggtga gctgagatcg tgccattaca cttcagcctg 39960 40020 40080 atcaagaaga tgggctgcac gtgatggctc acacctagac tcccagcgct tcaggaggcc 40140 gaggtggaag gatcacttga ggccaggagt tcaagatctg cctgggcaac atagcaagac 40200 cctgttttta cccaaaaaat aaaaaaatta cccagatgct gtggtgtgtg cctgtagtac 40260 cagctactga gaggctgagg caggaggacc gcttgagcct gggaggtcaa ggctgcagtg 40320 agetgtgate gtgccaetge actecageet gggtgacaca gcaagacett gtetcaaaaa 40380 taaataaaac attttaaaaa cacactaggt attgcaaata cagggcattt aatttggttt tttgtttctg ttttgttgtt gttttgagac aggtctcact ctgtcaccca ggctggacag 40440 40500 cagtggcaca gtcatggctc actgcagcct caacatccca gggttgagta atcctcccac 40560 ctcagcttct caggtagctg actatagata cacgccacta caccaagtta atttaaagaa aaaaaatgtg agaggccagg cgcagtggct cacgcctgta atcctgacac tttgggaggc 40620 40680 cgaggcaggc ggatcacctg aggtcaggag ttcaagacca gcctggccaa catggtgaaa ccccatctct actaaaaata caaaaattag ccaggtgtgg tggcaggcac ctgtaatccc 40740 40800 agctactcgg gaggctgtga cagaagaatc atttgaacct gggaggcgga ggttgcagtt agcogagate acgecattge actecageet gggtgacaag agtgaaactg cetetcaaaa 40860 aaaaagttta gaggcaaggt ctcactttct tctctaggct ggcctcaaac tcctgggctc 40920 40980 aagcagtctc ctgggcctcc caaagtgctg ggattacagg catgagactc catgctcagc 41040 ctegeactgt cacceagget agageteagt ggeacgatet cegeteactg taagetetge 41100 41160 cttccgggtt cacaccattc tcctgcctca gcctcccgag tagctgggac tacaggcgcc cgccaccatg cccggctaat ttttttctat ttttagtaga gacggggttt caccatgtga 41220 41280 accaggatag tetegatete etgaceteat gatecaceca teteggette ccaaagtget 41340 gggattacag gcgtgagcca ctacacccag ccaatacaag gaaattttta catggctgtt 41400 gaaagacaga ggaaaggcca aaagtggaca cttaggtaac ccagagatga ttgcaggaga 41460 gagctaccac cctcggtggg gggattgaag gggagaggtg atcacttgag ttatctaatg ttgcataggg aagtcacctc tcaacttggt tgcttaaagt aacagggatc actcattgct 41520 41580 catgatttct ggtttttttt ttttttttt gagacggagt ctcgctctgt cgcccaggct ggagtgcagt ggcacaatct tggctcactg caagccattc tcctgcctca gcctcccaag 41640 41700 tagctaggac tacaggegee egecaceaca eetggetaat tttttgtatt tttagtagat 41760 acagggttte accgtgttag ccaggatggt ctcgaactcc tgacctcatg atccgcccac cttggcctcc caaagtgttg agattacagg cgtgagccac cgcgcccagc ttgatttctg 41820 41880 tttgtcaaga atttgggagt cattttggtg gggaatttgt atgtgggggt ctctcctggg gctgcagtcc tttgagggtg taactggggc tgaagttccc ttccaagaac cctcatatgt 41940 42000 ggetcactca catggegge aatttggtge tageagttga ttetacagag aaaaaeggge ttgagccaat gtgctacaag ccaatactat gacaccaggc ttttggtttt ttgtttttat 42060 gatttatgta tgtatttttt ttttttttga gacagaatct cattctatca ccctggctgc 42120 42180 agtgcagtgg cacaatctcg gctcactgca agctccacct cccaggttaa agggattctc gtgcctcagc ctccctagta gctgggacta caggcgtgca ccaccatgcc tggctaattt 42240 42300 ttgtaccttt agtagagaca gggtttcact atgttggcca gactggtctc aaactcccga 42360 cctcaagtga tccacctgcc tcagcctctc aaagtgctgg gattacaggt gcaggcaacc atgactggcc gttttttttg tttttaaagt tggggtctca ctatgttgtc ccggctggtc 42420 42480 ttgaactcca aggetcaagt gateeteetg eetegacete eeaaagtget aggettacag tcatgagcca ccatgcccag ctgacaccag gcttttcaga aaagaatagc tttattgcaa 42540 gtcaaccagt aaggagacag aagtctagct caaatctgtc cccctgtgct ggctttaagg 42600

42660 cggtaatttt attaggaaag gtttaggggg tggattctga tattaggtga ttggcggaag caaaggggag gcctggaaag tgctcaggca tgcgcagttc cctcttcatg ttatctcatg 42720 42780 gggggcatgt gcaaattccg ggggtggtta gtatgtaaca tgcactggaa attcgggctg tgacatcagc aagcttgttc tgtgcaaact gcagttggcc atattggtcc caatctattt 42840 42900 cagccagcgt gttaatccca ccagcagatg aatttcagca tttctgcaag tcgtttcttt ttttatctgc catcctgcaa actggaaaat ttctgctagt cactggtttc tttaactctt 42960 tggggcacgg tttcactggt aggaggcctc agtttatccc atgggcctct ccatagggct 43020 43080 acttcagagt ccccacagca gcctccagaa tgaatatccc aagaaagaaa agaaaagtgc 43140 cactaggggc cgggtgtggt ggctcacgcc tgtaatccca gcactttgga agtctgaggc 43200 aggaggatcc cttgagccca gaagttcaag ccagcctggg caatgtaggg agacgccatc 43260 tctactaaaa aaaaaaaaa aaaagaagaa gaatttaggc cgggcgtggt ggctcacgcc tgtaatccca gcactttggg aggctgaggc aggcggatca cgaggtcagg agtttgagac 43320 43380 cagcctggcc aagatggtga aaccctgtct ctactaaaaa tacaaaaatt agccaggcac ggtggcgggc gcctgtaatc ccagctactc aggaggctga ggcaggagaa ttgcttcaac 43440 43500 ctqqqaqqcq gagqttqcaq tqaqccaaqa tcgtqccact gtactccaqc ctgggtqaca aagcaagact ccatctcaaa aaaaaaaaaa aaaaaaaaag aaagaaatta gctgggtatg 43560 43620 gtggcacaca cctgtggtcc cagctatttg ggaggccaag gcaggaggat tggttgagcc 43680 cagaaggtca aggctacaat gagccagatt gtaccattgc actccagcct gggcaacaga 43740 gtaagacgcc atctcaaaaa aagaaaagag gccaggtgca gtggatcaca cctgtaatcc caacattgtg ggaggccaag acaggatccc ttgaggccag gagtttgaga ccagcctggc 43800 caacttggca aaaccctgtc tttaccaaaa aatacaaaaa taagctgggc gtggtggccc 43860 43920 actoctgtaa toccacctac ttgggagget gaggegggag aatcacttga acctgggagg 43980 cagaggttac agtgagccga gactgcgcta ttgcactcca gcctgagcga cagagcgaga 44040 ctccgtctca aaaaaaaaga aaaaaattac cacaagcgca gctctgggtg cattgcttat gaattaactc ctgctttgca aggagcagct ctggttcaat aaaagattgc tgtgtaacac 44100 44160 caccagetta ecettgaatt etttgagtga aaccaaaaac eeteecagge taatecacaa tttgggggct tagctatatg cctgtatcgg tactaattgt cttcattatt gtagctttgt 44220 44280 tgtaactttt gaagttgaga aatgtgagcc ttccaacttt gtttttcttt ttctagactg 44340 ttttggctat ttgaagtccc ttgaatttcc acaagaattt tttttttta agtgccaaga teteagetea etgeaacete tgeeteeeag gtteaageaa tteteeeaae ttageeteee 44400 44460 aagtagetgg gactagagge atgeaceace atgetaattt ttgtgttttt agtagagatg 44520 gggtttcacc atgttgtcca ggctggtctc aaactccttg cctcaagtga tccacccacc 44580 ntcaggetee caaagtgetg ggattataga tgtgageeac catgeecage etecacatga atttttagga tgagcttgtc aatttctgaa aacaagccag ctggggattt gtttgtttag 44640 44700 acacaagatg tcattctgtc acccagactg gagtgcagtg gcacaactcc tagctcactg 44760 cageetggaa eeectagget caagtgatee teteatetea geeteetgag taecagggaa 44820 tacagacaca tgccaccatg ccctgctaat tttttaattt ttgtagcgac atggtctcaa actectgece aaccaggetg atetetttt ttttttgaga tggactetca etetgtegee 44880 caggetggag tgcagtggeg caacetegee teactgeaac etetgeetee tgggttcaag 44940 45000 cgattctcct ccctcagcct cccgagtagc tggtgggcat gggcgcctgc caccatgccc ggctaatttt tcatattttt agtagagatg gggtttcacc atgttggcca ggctggtctc 45060 45120 gaacteetgg ceteaagtga teeteetgee teageeteee acageactgg aattacagge atgagtcact gttcccggtc cagctgagga ttttgacagg gattggttta tgtctatatg 45180 45240 tgaactgggg agtattggaa tattgacatc gtaataatat taagtctctc aggccaggca tggtggctca cacctgtaat cccagcactt tgggagctcg aggcaggtgg atcaattgag 45300 gtcaggagtt caagaccagc ctggccaaca tggcgaaacc ccgtctctgc taaaaataca 45360 45420 aaaattagcc aggtgtggtg gtgtgtgcct gtagttccag ctacttggga ggccgaggca 45480 agaggatcac ttgaacctgg taggcagagg tggcagtgag cctagattgc accactgcac

tccagcctgg gtgaaagagc aaggctctgt ctcaaaaaaa aaaaaaaaa aaggaagaag 45540 45600 tacctgaaac tgggtaattt tttttttgag aaaggatctt gctctgtttc ccaggctgga 45660 45720 gtgcagtggc acaatcttgg ctcactgcaa caaccacctc ctgggttcaa gcgattctca 45780 tgcctcagcc tcctgagtag ctggaattga gatgtgcaca ccacgcccag ctaattttta 45840 tatttttagt agagacgcgg tttcatcatg ttggccaggc tggtctcaaa cccctgacct 45900 caggtgatca acceacetea geeteecaag tgeegeaatt acaggegtgt gagecaetge 45960 gcccggcttc aaaagtacca tttaatggct gacaattact tgccctgaaa tgtgaaacaa 46020 aattcattta ctacattgtt tttaagatag cacctgacct tcagtaatcg gaaataatga 46080 tttcctataa ataaaaacca ctgcagtgct tttagtgatt agtgtacata gagtttttcc cctggctgtg acatcatatt attaaaagca ttaagcacct ggaattcatg ctgtagttga 46140 46200 tttataagtt acataatgta caaagctcct tttataagaa tgttttgtgg tcacaattac 46260 ttcaaaaccc aattacattc aaataatcta atagctcatg ctttggcaat tatagaagtg 46320 tgattttgac acatagaaat tttatgaggt tagcaaataa aaaacgctat aaaagaggtg 46380 aacaatggtt cctctgttta aatttagagt gcagcaatat ttaggtaata tttttcagtt aatataatca gcctagaata tagcattgta aatcatacag tgttttagaa atacggatct 46440 46500 aaagaaggta ataccttttc caaattataa aattttggca aatcaataca gtactttgta atacaataaa actatgtttt tgttggagtc atatatgact ttaatcataa tttccactgc 46560 aaaagcacca cctaaatact aaatcaatta tgaaggcttt tcatgacagt ttataacaga 46620 qtcaqttqtt ttacacaaat taatatggct tttaaaaaaat tatataattt cttggccggg 46680 46740 cacactggct catgactgta atcccagcac tttgtggggc tgagaccagc aaattgctga gctcaggagt ttgagaccag catggacaac atggcaagac cctgtctcta aaaataaaaa 46800 46860 tgttttaaaa gctgcagagt taacacagta gagaaatcat gtgcatataa aatatgctac gtttccttct gggattggtc caaaactgct cacaaaaaac ttcaaaactc tactttaaga 46920 46980 agttccaggc cgggcacggt ggctcacgcc tgtaatccca gcactttggg aggccgaggc 47040 aggegaatea caaggteagg agttegagae cageetggee aacatggtga aacceegtet 47100 ctactaaaaa tacaataaaa attagctcag catagaggcg tgcgcctgta atcccaggta 47160 ctcgggaggc tgaggcagga gagtcacttg aacctgggag gcggaggttg cagtaagcca agatogogot actgoactoc agoccaggog acagagogag actotgtoto aggaaaaaaa 47220 47280 aaaaaaaaag aagctccaat accaaattaa agtcgttttt caagtattgg taaatcttcc 47340 ataaacaggg caacacttaa tgatcaatag atcattcgac tagggcttat gctggtggat 47400 ctcttttgtt taaagctcca aactcagctg ggcttggtgc ttcacgcctg taatcccagc 47460 actttaggag gccaaggcag gtggatcacc tgaggtcaga agttcgagac cagcctggcc 47520 aacatagtga aacccccgtc tgtactaaaa atacaaaaat tagacaggcg tggtggcaca 47580 gaaaaaaaaa gtcaattatc ctatttgggg atttaaatta tactatttt tattttttg agacagagtt tcactctgtc acccagtctg gagtgcagtg gtacaatctt agctcactgc 47640 47700 aacctccacc tcctgagttc aagcgattct cctgcctcag cctcccgagt agctaggatt acaggcacca gccaccacct ggctaatttt tgtatttttt gtagagacgg ggtttcacca 47760 47820 tgttggccag gctggtctca aactcctggc ctcaagtgat ctgcctgctt cggcctccca 47880 aagtactggg attacaggag tgagccacca caccacctcg accagccttt tcctctataa atttaaaaaa aaaaaaaggc caggtgcgga ggttcatgcc cgtaatccca gcactttggg 47940 48000 acggatcact gtaattccag ctactcagga gcctgaggca ggaggatcac ttgaacccag 48060 gagtoggagg ttgcagtgaa ccaagattgo tocactgcac tocagectgg gcaacagagc 48120 aagactccag ctcaaaaaca aagaaaaaag aaaaaggcca ggtaaggtga cttacatctg 48180 taatcccagt actttgggaa gctgaggcag gaggattgct tgagcccagg agttcaaggc tacagtaagc tagtaagcta tgattgcacc actgtgctgc agcctgggtg acagagccag 48240 48300 gccaaattgt ttctcaaagc agttctagtg atttatggtc tcacttgcag tatatcagat 48360 tcttcgttgt ccagatcttt ttaatttttt acagactaac aggtacaata cagtatctta 48420 48480 ctgtggtact aatttgagtt tccctgattt cctctatagt tgagcatctt tacgtgttta 48540 gtggccactc atgtttcttc agatcttctg cctgccttcc tccctccctt cctcccttcc 48600 tecetecett cetecettee tecetteete ettecegeee tecetteett tttttttt ttttttttt ttttgagacg gagtcttgct ctgtcgccca ggctggagtg cagtggcggg 48660 48720 acctcagete actacaaget ecaceteeca agttaaateg attateegge etcageetee 48780 tgagtagctg ggactacagg cgcccgccac cacgcccagc taattttttg tattttcagt 48840 agagacaggg tttcaccgtg ttagccagga tggtctcgat ctcctgacct catgatccgc 48900 ccacctcggc ctcccaaagt gctgggatta caggcgtgag cgtgagccac cgcgcccggc 48960 cccttccttc tttttttta aaaagagaga cgggtgctcc ctttggcagc agatatacta aaaaagagag acgggaaggc caggcacagt ggctcacacc tgtaatccca gcactttgag 49020 49080 aggccgaggc tggtggatca cctgaggtca gaagttcgag accagcctgg ccaacatggt gaaaccccat ctctactaaa aatacaaaat tagacgggtg tggtagtgca tgcctgtaat 49140 49200 cccagctact caggaggetg aggcaggaga atcaatgaac ccgggaggcg aaagttgcag agagatgaga ttgtgccatt gcattccagc ctgggcaaca agagcgaaac tacgtctcaa 49260 aaaaaaaaat gcataagttt tgtgaacaaa tatttcataa ttttctctac tgaggtctta 49320 49380 gacttttttt ttttacattt tacagaatac ttcatatctt ctttgtctct cccctttttt 49440 tttgcaatca ccttgaaaac attaagattc agatggtcct ctaattttcc tgtctcctgt 49500 49560 agagteteae tetgetggae aggetgeagt agagtgatgg catetegget egetgeaace tecgeetect gggeteaagt gatteteetg etteageete eegagtaget gggattateg 49620 gcatgtgcca ccacccctag ctaatttttg tatttttagt agagacgggg tttcaccatg 49680 49740 ttggccaggc tggtttcaaa ctcttgacct caagtgatct gcccacctca gcctcccaaa ctgctgggat tacagacgtg agccactgcg cccagcctgt tatcctttgt ttttggaagg 49800 aagcatttga aaaagagtga ctctatcttg aataggggct gggtaagatg aggctgagac 49860 ctgctgggct gcattcccag taggtgagac attcttattc acaggatgag acagaaggtt 49920 49980 ggcaggactg gtatcacaag atacgggtca caaagaccct gctgataaaa caggatgctg 50040 acagggcaca gtggctcact cctgtaatcc cagcattctg ggaggctgag gcgggcaaat 50100 cacttgatgc caggagatca agaccagcct ggccaacatg gtgaaaccct gtctctacca 50160 aaaatacaaa aattacccag acatggtggc aggcacctgt actcccagct actcaggagg 50220 ctgaggcaag agaattgctt gaacteggga ggcagaagtt gcagtgagcc aggategcac cactgcactc cagacggggc aacagatcga gactccatcc caaaaaaaaa aaaaaaaaag 50280 aaaacaaaaa caggacgcag taaagaagcc agccccaaaa cccaccaacg gtgatgaaac 50340 50400 tgacctctgg tcatcctcac tgctcattat acactaatta taatacatta ccatgctaaa 50460 agacactece accaggacta tgacagttta caagtgecae ggcaacacee ggaagttace 50520 ctatatggtc taaaagaagg aagaaccctc agttctggga aatccctgcc ctttcctgga 50580 aaactcatga ataacccata cttcgtttag catagaatga agaaataact gtaagtatac teagteaage ageeeatgee actgetetge etatggagga gteattettt atteetttee 50640 50700 tattettttt ttttttttet ttttegagae agagteeeae tetgttgeee aggetggagt 50760 gcagtggcac gatcttgact cactgcaacc tctgcctccc aggttcaagc aattctcctg 50820 cctcagcctt ccgagtagct ggaattacag gtatgcacca ccacacccag ctaatttttg tatttttaat agagatggag tttcaccagg ttggccaggc tggtctcgac ctcctgacct 50880 50940 caggtgatec acttgeetea geeteecaaa gtgetggaat tacagaegtg ageeactgeg 51000 cccggctatt cctttatttt cctgataagc ttgctttcag gtcgggtgtg atggttcaca 51060 tgtgtaatcc cagcactttg ggaggcctaa gtggcaggac tgcttgagcc cagaaattca agaccaacca gcgccacata gtgagtgaga ccatatttct attaaaaaaa aaacgaaaac 51120 51180 aaaaaaaact tggccaacat gacgaaaacc tgcctctact aaaaaaatac aaaaattagc

51240 caggaatggt aacacatgcc tgtaatccca gctactcagg aggctgaggc aggacagtca 51300 cttgaacctg ggaggcagag cttgcaatga gctgagatca agccactgca ctcgagcctg ggtgacagag cgagactctg tctaaaaaaa aaatacaaaa taaaaaaaag aacttattta 51360 51420 tgtaaccaaa taccacctgt tcacctgttc cccaaaaacc tgttgaaaca aaaataaata aataaatata aagaaataat ttttatttat ttattttatt atattttgag acgaagtttc 51480 51540 actettgteg eccaggetgg agtgeaatgg egtggtetea geteaetgea acetetgeet 51600 cctgggttca agcgattctc ctgcctcagc ctcccgagta gctgggacta caggcacctg ccaccacgcc tggttaattt tgtattttag tagagacagg gtttcaccat gttggtcagg 51660 51720 ctggtctcca gctcctgacc tcaggtgatc cacccgcctt ggcctcccaa agtgctggaa ttacaggtgt gagccaccac acccagcctt taattttatt ttctatagag aggagtccca 51780 taatattacc caagctggtc tcaaactctt ggcctcaata aatcctccca cctcagcctc 51840 51900 ctgagtagct aggactacag gagtgcacca ccatgcccag ctaatgtttt tatgttttgt 51960 agagatgagg gtctcattat gttgcccagg ctcgtcttga actcctgggc tcaagtgatc catcctcctg cctcagcttc ccaaagtgct gggattacag gtgtgagcaa acatgcccag 52020 52080 cctaatatta ttaatacatc gtagctgtcc atatttatag ggtgcatgtg aaattttgtt 52140 acgtgcatag aagtgcgatt gtaggaacca aggaaaaaac ttctgcttca ccttctcaag 52200 gtttgctgat aaatcagctc acaaaaggca gattaattgg aaaaaggggg atacaaattg 52260 cattcacacg tatctgggga gaaccacacc acagegtgat tacccaccac cccaaaggca ttcagacgct tatataccat cttctttttt ttttttaagt agagactggg ttttcgccat 52320 gttgccaggc tggtcttgaa ctcctgcact caagtgatct tcccctcttg gcctcccaaa 52380 52440 gtggcgctgg gattaccgcc atgagccact gtgcctggca ctatatacat atatatagat 52500 atgtatacat atctatatct atagatatct atatatctat agatatctat atatctatat 52560 ctatatgtat acatatctat atatatagac atgtgtatat atatctatag atatctatat 52620 ctatagatat agatatacta tcttgcagat acagaaagaa taggggtttg gatcctggta 52680 aaacaggtta tggcaggggg aagaaagagg aattctattg aggggacata aaagattact 52740 gggggctagg cagagtggct catgcctgta atcctagcac tttgggaggc caaggtgggc 52800 agatcacttg aggtcaggag ttcgagacca gcctggccaa catggcgaaa ccctgtctct 52860 actcaaaaca caaaaattag ccagtcatgg tggcacatag ctgaaatccc agctactcag gaggetgagg caggagaate acttgaacee aggaggagga agttgcagtg agetgagatg 52920 52980 gcatcactgc actccagcct gggtgacaga gtgagactcc atctcaataa aaataaaaat 53040 aaaaataaag cattgctggg gagaatgaat ggatttagga acagagatta acttgtacat 53100 aattetettt ggaattteaa tgageetgag ggagaeatta tettgeggaa gagtetgtte 53160 aggtgtggtt ccattcttga ttttatagaa aggagaagaa aaaaaaacaa ttgttttcct tgttgagggg ggatgtctgg atcttaggca gagaaagtaa cttcaacttc atcctgtgct 53220 53280 gtgggagaaa agacggtett ttagacacag tttategtta etgetgettt teetgtgttt ggcctatacc ttcctgcctc tttgaatgat gggtagacca gagtttgtga gtcaatttgt 53340 53400 attagctgtg tgatctggag caagctactg ttgtcagagg agtttgaacc acagtgattc catcttgaat agggggtggg taaaatgagg ctgagacctg ctgatattga caggaggcag 53460 53520 ccaattgcct aggccaatag gggcgggtcc gcggtgaaac cccacctcca acccgaagac 53580 ggtttaaagc ctgaaactga aggtacaagt ttaaacctta gaccggattg agagcttacc ttcctgtttg tcgcgctttc ctctgattga tccccaccct tcgcctattt tacatatacc 53640 53700 caccetttee taattggttt tetaetettt etttttttt ttgacagagt etegetetgt 53760 cacccagget ggagtgcagt ggtgcaatet cggeteaetg caateteeae eeecegggtt catgtcattc tectgeetea geeteeceag tagetgggae tacaggegee tgetaceaeg 53820 53880 cccggctaat tttttgtatt ttttagtaga gatgaggttt caccgtgtta gccaggatgg cctcaatctc ctgaccttgt gatctgcccg ccttggcctc ccaaagtgct ggcattacag 53940 gcatgageca cegtgecegg eggtttteta etettteatg accaeetttg agtagtgtet 54000

ttgctttaac	tcacctcatt	agcataaact	ccagtgtgat	caaaaggact	cattataaat	54060
aacaaaagac	attcctccaa	ctcctggact	taagggatcc	ctcaagcaag	cctcagcctc	54120
ctgaatagct	gggactactc	ctttttgcat	actcacaagc	caatcagcac	acactcccca	54180
ccctgtgcct	ataaaggctc	cagactcagt	cagcagggga	aaagacgacc	tgacttcggg	54240
gaaggcaacc	tgcacttccc	atcccctctc	cagctcccct	ctccactgag	agtcgctttc	54300
attgctcaat	aaaattctcc	accttcatca	tccttcaatc	gtccgtgtaa	cttcattctt	54360
	ggacaagagc					54420
	tgccctcgcc					54480
	ctgacatgtc					54540
	gcagcttcgg					54600
	tgcctgctct					54660
	cagctggcca					54720
	agggggctga					54780
	ctgcatcacc					54840
	aggagggtgg					54900
	agaagccggc	_				54960
	ggtgcggtgg					55020
	ctgaggccag					55080
	atacaaaaaa					55140
	gaggcaggag					55200
	ttgcattcta					55260
	cctctggtcg					55320
	actcccatca					55380
	attgtctaaa					55440
	tttgggaggc					55500
	tgtgaaaccc					55560
	taatcccagc					55620
	agcagtgagc					55680
	tcaaaaaaaa					55740
	ttcatgaata		_			55800
	gccagcaacc					55860
	tttttttt					55920
	tggtgcaatc					55980
	agcctcccaa					56040
_	ttttagtgga					56100
	atgatccgcc					56160
	agcctattcc					56220
actcgcctgg	aattgtttct	tgcgtgagat	tcaagaactc	tctcttggct	gggtgtggtg	56280
	gtaatcccag					56340
	agcctgacca					56400
tagccgggcg	tggtggcacg	tgcctgtaat	cccagctact	caggaggctg	aggcaggaga	56460
	cccgggaggc					56520
	aaaaaaaaa					56580
	actcctttcc					56640
	tcaaagggca					56700
	ttcctaacca					56760
	cctgaccatg					56820
aatagaaatc	tggccaggca	tgggggctca	cacctgtaat	tccaacactt	tgggaggctg	56880

gggtgagaga	attgctggag	ctcaggggtt	ggagatcacc	ctgggcaacc	cagtgagagg	56940
ctgtctctac	ggaaaagatt	ttaaattagc	ctggtgtggt	agtgcacacc	tgtagtacca	57000
gctactcagg	aggctgcatt	gggagtattg	cttaagctca	ggaggtcgag	gctctagtga	57060
ggtgtgatcg	caccgctgca	ctccaacctg	agcaacagaa	taagaccctg	tctcaaaaaa	57120
aaaaaaaaa	aaaaaaaatc	atggccgggc	gtggtggctc	acggctgtaa	tcccaacact	57180
ttgagaggcc	aagggatcac	ctgaggtcac	gagttcgtga	ccagcctgac	caacatggtg	57240
aaaccccgtc	tctactatag	acaaaaaatt	agacaggcat	ggtggcacat	gcctgtaatt	57300
ccagctactt	gggaagctga	ggcaagagaa	tcacttgagc	tgaggcggca	gaggttgcag	57360
tgagccaaga	ttgcaccatt	gcattccagc	ctgggccaca	agagtgaaac	tctgtctcaa	57420
aaaaataaca	ataattttt	ttttttttg	aggtggagtc	ttgccctgtc	acccaggctg	57480
gaatgcagtg	gcacgacctt	ggctcactgc	aagctccgcc	tcccgggttc	acgccattct	57540
cctgccccag	cctcccgagt	agctgggact	acaggcgcct	gccaccacgc	ccggctaaat	57600
gttttgtatt	tttagtagag	acagggtttc	accatgttag	ccaggatggt	ctcaatctcc	57660
tgatctcatc	atccgtccgc	ctaggcctcc	caaagtgctg	ggattacagg	tgtgagccac	57720
cgcgtccggc	caatatttt	cttttttta	aatcatactt	ccaggtccng	gtgcggtggc	57780
tcacacctgt	aatcccagcn	ctttaggagg	ctgaggtagg	cagatcacaa	ggtcaggagt	57840
tcgagaccag	cctggctaac	atggtgaaac	cctgtctgta	ctaaaaacta	caaaaattag	57900
ctgggcgtgg	tggcacacac	ctgtaatgct	agctactcag	gaggctgagg	caggagaatt	57960
gcttgagccc	gggaggcgga	ggttgcagtg	agctgagatc	acactactgc	actcctgcct	58020
gggggacaaa	gtgagactct	gtctcagaaa	aaaataataa	taataaatca	tacttacccc	58080
caccctaaga	caaaagcata	attgacttct	tcctctactc	tgtgtttact	ttatcttgtg	58140
taaaatacag	atatatttag	cacaagatga	attcataata	gactgttcct	ttttccctcc	58200
tttcacatgt	gttaaaagaa	aaacttcagc	caaattaaat	ttaagggagt	ttaattgagc	58260
aatgaacaat	ttgtgaatcg	ggcagccccc	agaatcacag	ccgattcaga	cagactccag	58320
tgcagccatg	tgatggaaga	agatttatag	acaaagggaa	atgacataca	gaagtcagtg	58380
aggtacaaaa	acaactggat	tggctacagg	tcggcatttg	ccttatttga	atatggctca	58440
aacagttggc	tacatctgac	tggccaaaac	tcagtgattg	gcacagggtg	tgggctatgg	58500
ccgagttata	cctccgcttg	ttacagttca	caatgtacag	aaaaaccttt	aggccaaatt	58560
gaaatatgta	aagaagcagc	tttaggctaa	acttgattaa	cgtatgtaag	atgtggattc	58620
agtgatcatg	aatgaaagcc	tcacagaaag	tgaccactta	tttcactacc	ttccctagtg	58680
tttttgttgt	tgttgtttgt	tttgttttgt	tttgttttt	gagatggagt	ctcactatat	58740
catccaggct	ggagtgcagt	gaagcgatct	tggctcactg	caagctccgc	ctcccgggtt	58800
cacgccattc	tcctgcctca	gcctcctgag	tagctgggac	tacaggcgtc	cgtgaccacg	58860
cccggctaat	ttttttgtat	ttttagtaca	gacggggttt	cactccgtgt	tagccaggat	58920
ggtctcgatc	tcctgacctc	gtgatctgcc	cacctcggcc	tcccaatgtg	ctgggattac	58980
aggcgtgagc	caccgcaccc	ggccaccttc	cctcctttt	catttctttc	ctccttcccc	59040
tcctgcccac	tctttctcct	ttaaatattg	aagtcctcaa	aactctctgg	aaaagccatg	59100
ggtcacagat	ttttctttgg	cttgggtctc	tttttcctgg	gcatgtcctc	aaccttagca	59160
aaataaacct	ctaaattcat	tgagtcccct	cctctcccct	cccctcctct	tcccttccct	59220
tcccttcccc	tttctttgag	acagggtctc	actctgtcat	ccaggccagg	gtacagtggt	59280
gcaaatgata	gggacaagag	gcagggaaat	tctgggcaga	agagggtggg	tccccagaga	59340
gggcattgcc	ctcaagctga	aaaacctgga	actgcagccc	aaagtgagaa	ctgacatccc	59400
tgttttttgt	tttttggttt	tttttgagat	ggagtctccc	cttctgtcac	ccaggctgga	59460
gtacaatggt	gcgattttgg	ctcactgcaa	cctccacctc	ccgggttcaa	gtgattctcc	59520
	tcccgagtaa					59580
aatttttgta	tttttattag	agaaggggtt	tcactatctt	ggccaggctg	gtgttgaact	59640
cctgatttcg	tgatccaccc	tccttgcctc	ccaaagtgct	gggattacag	gcatgagcca	59700

ccgtgcccag ccaacatcgc tgctttcctg cttgaatgtt gccttttcca aaaccaccct 59760 tgacctgccc tgcccccaat cctgtgccca taaaaacccc aggcccagct agcagagaga 59820 59880 ggagaagcag ctggacgtca aagaccatgg ttgaacattg gagagaagtg gcttgacttc 59940 agagggacag tttgctggag tagctttgga ggagtatggc cagggacagc tggacttcag 60000 agaaagatta ccttcctgct ctgtcccctt ttcagctccc cttcccgctt agagccactt 60060 tcatcagcaa taaagtctcc tgcatttacc atcttcaatt catttgtgtg acctaattcc tcctggacac tgaaaaagaa cttgggtgcc acgagtgtgg atgcaaaagg ctgtcacacc 60120 60180 gatectecae taagetgtta acaettaage catteacaga cageagaget aaaagagtae tctaacactg cctctggggc ttcaatagtc tccggcaccc tccgctagac actatcatgg 60240 60300 ggctggtatg gagatggctc ttgctggcgc ctaaaaactc tcgccccgtc tcctgcacct 60360 gctcacctgt gctccctctc ctgtgagggg tggagtagtg agtgagtgga gttcacccct accagcacca aagcagctgg ctagttctta ggcaacatcc tgcttcacaa tcacagctca 60420 60480 etgeaacete ceacetecea ggeteaagtg tteeteetge eteageetee caaagtgetg 60540 ggattgcagg catgagccac catgcccagc cagtcatttt ctttggttta cactacttta 60600 cctccctgag ccttattttc cccaaatgag aggtagaaac tcctctgttg ggaggattaa 60660 atgagatatg tctcaaattt ttgttgaaaa ctggacattt tattttatct tattttactt atttttgaga caaggtctca ctcactctgt cactcaggct agagtgcagt ggtgcaatct 60720 60780 tggctccctg aaagcttaac ctcctgggct caagtgatcc tcctgtctca gcctcctgag 60840 cagctgggac tataggetec agecaccaca cttggetaat ttatttttat ttttattttt tgtagagaca gagtctcact atgttgccta ggatggtctg gaactcctgg gctcaagtgg 60900 60960 ttctcctgac tcggccccac aaagtgctgg cattacaggt gtgagccatg gcacccagca aaaactggac attttaaatc atgtattgta attctaaatt ctgatgtcct ggtggtagct 61020 61080 gttgtagatt ttgacattgt tgttgtttgc tggttgtctg tttggttgtt taataacttg 61140 aagccactaa aggaagcctc tgttttgttt tgtgattctt gcttttattt tcaagactgg cttcctaggg gtccatctct gaatcagcat tgcttagtgc ccagccactg tttggtcaga 61200 61260 aggtttccgt aaacaccttg acacactaag ccttccttgg tcaagaggac ctgtgagggg ggttgggaca caggttaaat tatttcctca agggcgttga catttctttc tttttcttt 61320 61380 tttttttgag atggagtetg tetetateae teaggetgga gtgeagtage atgatettgg 61440 ctcactgcaa cctctacctc ccaggttcaa gcgattctcc tgcctcagcc tcccgagtag 61500 ctgggattac aggcgcccgc caccacaccc aactaatttt tgtattttag tagagatggg 61560 gtttcaccac catgttggcc aggctggtct ggaacceteg acttcaagtg atccacctgc ctcagcctcc cagagtttgg gattacaggt gtgagccacc acacctggcc tctttttttc 61620 61680 ttttcttttc ttttttttt tttttgagat ggagtttcgc tcttgttgcc caggctggag ggcaatggca tgatctcggc tcactgcaac ctctggctcc cgggtacgag caattctcct 61740 61800 gcctcagcct cccaagtagc tgggactata gacatgcgcc acacgcctaa ttgtttgtat 61860 ttttagtaga gatggggttt caccatgttg accaggcagg tetegaacte etgaceteag 61920 gagatetget caceteagee teccacaggt atgagecace atgeteaget ttattttgtt 61980 ttattttatt ttattttatt ttattttatt ttatttgaga cagagtctcg ctctgtcgcc 62040 caggetggag tecagtggag etatetegge teaetgeaac etetgeetet caggtteaag 62100 caatteteat gteteagtet eteaagtage tgggattaca ggtgtgtgee accaegeeea 62160 gataattttt ttattattag ttttagtaga gtcggggttt tgccatgttg cccagcctgg tettgtaete etgaeeteaa gatateeaee egeeteggee teeeaaagtg etgggattat 62220 aggcatgagc caccataccc ggcctctttt tttaattttt atggatatgt ggtaggtata 62280 tgtatttatg aggtacatga gatattttga tacaggcata caatgcatca taatcacatc 62340 62400 agagtaaatg gggtatccat catctcaaac atttatcatt tctttgttac aaacattcca 62460 attatgctct tctagttatt tttaattgca taataaatta ttgttgactg cccaggcaca gtggctcacg cctgtaatcc cagcactttg ggaggccgag gcaggtggat tgcctgaagt 62520 62580 caggagttca agaccagcct gaacaacatg gagaaatccc gtctctacta aaaatacaaa

attagccagg	tgcagtggcg	catgcctgta	atcccagcta	cttgggagga	tgaggtagga	62640
	aacccaggag					62700
agcctgggcg	acattttgta	tgacattgct	taaccataaa	ctcttcattt	gcttttgttt	62760
ttcttttctt	tttttttgag	acggagtctc	gctctgttgc	ccacgggttc	caccgtgtta	62820
gccaggatgg	tctcgatctc	ttgaccttgt	gatccgccag	cctcggcctc	ccaaagtgct	62880
gggattacag	gtatgagcca	ccacccacgg	cctgtttttc	attttattgt	ctgagaatcc	62940
cttgcagcct	gggggcatag	attcggggaa	ttctcccact	cctcactttc	ttttcttcct	63000
taggaatatc	ttggccaggt	gcagtggctt	acacctgaaa	tcccagaact	ttggcaagct	63060
aaggcaggag	gaatgcttga	ggtcaggagt	ttgagacccg	cctggggaac	aaagtgagat	63120
cctatctcta	tttaaaaaat	aagaataatg	gccagtcttg	ggggatcact	cctgtaatcc	63180
cagaactttg	gaaggcagag	gtgggaggat	cacttgaacc	cacaaggttg	aggctgcagt	63240
gagacgagat	tgttctgcca	cactccagcc	tgggtggcag	agtgagaccc	tgtctcaaaa	63300
caacaacaac	aattaaaaaa	aaaaaaaaa	gaatatcttt	atttctgact	tgggggcttg	63360
caggtggctg	aactatttct	gtggaatgat	ctggaaaccc	acacatatgt	gaagccaggt	63420
cagggctttg	aattctttga	attatcaggc	tgaggcaggc	aagtttgtca	ctcctcaagg	63480
tagatgaact	catgatctcc	agtctaccct	ttcacagact	gtgtggcttt	tcaaggatca	63540
catttcaaag	ggatctcagg	cacaatttcc	atttgaactg	ggtccagata	caatttccat	63600
ttgaactgga	cctcaatgta	gtagtctctc	attgtttgaa	gtatcactcg	gagttctttg	63660
tctcacaacc	atgaaaatta	aggagcatgg	gcaccaagga	tgaggctgga	gtgaaagttt	63720
aataagctaa	agaagaaagc	tctctgccgt	ggagaggggg	tctgaaagag	gccattatta	63780
tttatttatt	tatttgagac	agagtttcac	tcttgttgcc	caggctggag	tgcaatggca	63840
	tcaccacaac					63900
	tgggattata					63960
	tttctccatg					64020
	tcccaaagta					64080
	acagttgaat					64140
	aggtgtgaat					64200
	aatttactcc					64260
	aaaaagtgca					64320
	tctcctgacc					64380
	cagagcagag					64440
	ttctggattc					64500 64560
	tttttttaat					64620
	tgcctggcaa tctctgccaa					64680
_	ccagaattgg					64740
	ctttcccagt					64800
	tgagacaggg					64860
	gtagtcttgg					64920
	actacagatg					64980
	gacggagtct					65040
	agctccgcct					65100
	ctacaggtgc					65160
	caccatgttg					65220
	ccaaagtgct					65280
	tacagacagg					65340
	cccgtcttgg					65400

```
ccggccctgg ctaagtctta gacttttgtt tccccaacgt ctaacacagt ttcatggccc
                                                                     65460
atagaagata ctgagtgcat gaatgaggaa tgcacgaatg actcttggca gacacttcgt
                                                                     65520
ggtcagcata aaagagggag aaagctggct gggcaaagtg gctcacacct gcaatcccag
                                                                     65580
                                                                     65608
cactttggga ggccgaggcc agtggatc
       181
5190
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 181 gcctgtccta ctgccgccgg cgccgcggcc gtcatggggt tcctgaaact gattgagatt
                                                                        60
gagaacttta agtcgtacaa gggtcgacag attatcggac catttcagag gttcaccgcc
                                                                       120
atcattggac ccaatggctc tggtaagtca aatctcatgg atgccatcag ctttgtgcta
                                                                       180
ggtgaaaaaa ccagcaacct gcgggtaaag accctgcggg acctgatcca tggagctcct
                                                                       240
                                                                       300
gtgggcaagc cagctgccaa ccgggccttt gtcagcatgg tctactctga ggagggtgct
gaggaccgta cctttgcccg tgtcattgta ggaggttctt ctgagtacaa gatcaacaac
                                                                       360
                                                                       420
aaagtggtcc aactacatga gtacagtgag gaattagaga agttgggcat tctcatcaaa
                                                                       480
gctcgtaact tcctcgtttt ccagggtgct gtggaatcta ttgccatgaa gaaccccaaa
                                                                       540
gagaggacag ctctatttga agagattagt cgttctgggg acgtggcgca ggagtatgac
                                                                       600
aagcgaaaga aggaaatggt gaaggctgaa gaggacacac agtttaatta ccatcgcaag
aaaaatattg cggctgaacg caaggaagca aagcaggaga aagaagaggc tgaccggtac
                                                                       660
cagcgcctga aggatgaggt agtacgggct caggtacagc tgcagctctt taagctttac
                                                                       720
cataatgaag tggaaattga gaagctcaac aaggaactgg cctcaaagaa caaggagatc
                                                                       780
gagaaggaca agaagcgtat ggacaaggtg gaggatgaac tgaaggagaa gaagaaggag
                                                                       840
ctgggcaaaa tgatgcggga gcagcagcag attgagaagg agatcaagga gaaggactca
                                                                       900
                                                                       960
gaattgaacc agaagcggcc tcagtacatc aaagccaagg agaacacctc ccacaaaatc
                                                                      1020
aagaagctgg aagcagccaa gaagtctctg cagaatgctc agaagcacta caagaagcgt
                                                                      1080
aaaggtgaca tggatgagct ggagaaggag atgctgtcag tggagaaggc tcggcaggag
                                                                      1140
tttgaagaac ggatggaaga agagagtcag agtcagggca gagatttgac gttggaggag
                                                                      1200
aatcaggtga agaaatacca ccggttgaaa gaagaagcca gcaagagagc agctaccctg
                                                                      1260
gcccaggagc tggagaaatt caatcgagac cagaaagctg accaggaccg tctggatctg
                                                                      1320
gaagaacgga agaaagtaga gacagaggcc aagatcaagc aaaagctgcg ggaaattgaa
                                                                      1380
gagaatcaga agcggattga gaaactggag gaatacatca ccactagcaa gcagtcccta
gaagagcaga agaagctaga gggggagctg acagaggagg tggagatggc caagcggcgt
                                                                      1440
                                                                      1500
attgatgaaa tcaataagga gctgaaccag gtgatggagc agctagggga tgcccgcatc
                                                                      1560
gaccgccagg agagcagccg ccagcagcga aaggcagaga taatggaaag catcaagcgc
                                                                      1620
ctttaccctg gctctgtgta cggccgcctc attgacctat gccagcccac acaaaagaag
                                                                      1680
tatcagattg ctgtaaccaa ggttttgggc aagaacatgg atgccattat tgtggactcg
gagaagacag gccgggactg tattcagtat atcaaggagc agcgtgggga gcctgagacc
                                                                      1740
                                                                      1800
ttcttgcctc ttgactacct ggaggtgaag cctacagatg agaaactccg ggagctgaag
                                                                      1860
ggggccaagc tagtgattga tgtgattcgc tatgagccac ctcatatcaa aaaggccctg
                                                                      1920
cagtatgett gtggcaatge cettgtetgt gacaaegtgg aagatgeeeg eegeattgee
tttggaggec accagegeca caagacagtg geactggatg gaacectatt ceagaagtea
                                                                      1980
ggagtgatet etggtgggge cagtgacetg aaggecaagg caeggegetg ggatgagaaa
                                                                      2040
gcagtagaca agttgaaaga gaagaaggag cgcttgacag aggagctgaa agagcagatg
                                                                      2100
                                                                      2160
aaggcaaaac ggaaagaggc agagetgegt caggtgeagt eteaggeeea tggaetgeag
                                                                      2220
atgeggetea agtactecca gagtgaceta gaacagacea agacaegaca tetagecetg
                                                                      2280
```

aatctgcagg aaaaatccaa gctggagagt gagctagcca actttgggcc tcgcattaat

gatatcaaga	ggatcattca	gagccgagag	agggaaatga	aagacttgaa	ggagaagatg	2340
aaccaggtag	aggatgaggt	gtttgaagag	ttttgtcggg	agattggtgt	gcgcaacatc	2400
cgggagtttg	aggaagaaaa	ggtgaaacgg	cagaatgaaa	tcgccaagaa	gcgtttggag	2460
tttgagaatc	agaagactcg	cttgggcatt	cagttggatt	ttgaaaagaa	ccaactgaag	2520
gaggaccaag	ataaagtaca	catgtgggag	cagacagtga	aaaaagatga	aaatgagata	2580
gaaaagctca	aaaaggagga	acaaagacac	atgaagatca	tagatgagac	catggctcag	2640
ctacaagacc	tgaagaatca	gcatctggcc	aagaagtcgg	aagtgaatga	caagaatcat	2700
gagatggagg	agattcgtaa	gaaactcggg	ggcgccaaca	aggaaatgac	ccatttacag	2760
aaggaggtga	cagccattga	gaccaagctt	gaacagaagc	gcagtgaccg	tcacaacttg	2820
ctacaggcct	gtaagatgca	ggacattaag	ttgccactgt	caaaaggcac	catggatgat	2880
attagtcagg	aagagggtag	ctcccagggg	gaggactcag	tgagtggttc	acagagaatt	2940
tccagtatct	atgcacgaga	${\tt ggccctcatt}$	gagattgact	acggtgatct	gtgtgaggat	3000
ctgaaggatg	cccaggctga	ggaagagatc	aagcaagaga	tgaacacact	gcagcagaag	3060
ctgaatgagc	agcagagtgt	gcttcagcgt	attgccgccc	ccaacatgaa	ggccatggaa	3120
aagctggaaa	gtgtccgaga	caagttccag	gagacctcag	atgagtttga	agcagcccga	3180
aagcgagcaa	agaaggccaa	gcaggcattc	gaacagatca	agaaggagcg	ctttgaccgc	3240
ttcaatgctt	gttttgaatc	tgtggctacc	aacattgatg	agatctataa	ggccctgtcc	3300
cgcaatagca	gtgcccaggc	attcctgggc	cctgagaacc	ctgaagagcc	ctacttggat	3360
ggcatcaact	acaactgtgt	ggctcctggg	aaacgcttcc	ggcctatgga	caacttgtca	3420
ggcggggaga	agacagtggc	agctctggcc	ctgctctttg	ccatccacag	ctacaagcca	3480
gcccccttct	tcgtcctgga	tgagattgat	gctgccttgg	ataacaccaa	cattggcaag	3540
	acatcaagga					3600
	tctacaccaa					3660
	gcaaagtcct					3720
	agtagcagta					3780
	tctggatatt					3840
	gatttaggca					3900
	aaattcctga					3960
-	ccatctgtnc					4020
	ctcttgccca					4080
	gtgagtatgt					4140
	tgaatttgat					4200
	ggacctcata					4260
	tcattcattt	_	-			4320 4380
	cttggaatac					4440
	gttcatgaat					4500
	gntgatcccc					4560
	gatttggtca gtcccacttt					4620
	cctcagtttc					4680
	gatgtcaagc					4740
	ctcagaatat					4800
	aagaagcctc					4860
	ctgatggggt					4920
	ggtaaccggg					4980
	gccacatccc					5040
	ggatcatgca					5100
<b>-</b>	55		2 222 3		_	

attcacatac accatcacac cattctaatn ncccaaatat		atctgtatat	tgctttttaa	aagttaagtc	5160 5190
<210> 182 <211> 4068 <212> DNA <213> Homo sapiens					
<400> 182	agat at tast	tataaaaaa	gggt ggaaaa	aatttttat	60
aacagacaca gactcgcagg					120
ataaagggcc agagagtaaa					180
gcagtccttg gttattatag					240
aaccatgctc caacaaaact acatgtcaca aaatatcact					300
<u>-</u>		-			360
tgcaggcagt acagaaacag					420
agggtctgtc acagaagact					480
attaacaggt gtgcctgttt					540
acgctgcact tcgagatttc					600
gtctggctct tcctaaaagt					660
ctcttccagc agcagaagca					720
gtgggcttaa agggggagag					
aagagcacct ggcatgtctt					780
aagagctccc tggacgttcg					840
gttctcctgg gcaagaagaa					900
ggtgaaggtg gggcaggagc					960
ctgcaggccc ggcagtctga					1020
gatggcaagg tcaacatctg					1080
tggaatgact ggatcattgc					1140
ccgagccata tagcaggcac					1200
cactaccgca tgcggggcca					1260
aagctgagac ccatgtccat					1320
attcagaaca tgatcgtgga	ggagtgtggg	tgctcataga	gttgcccagc	ccagggggaa	1380
agggagcaag agttgtccag					1440
agttaaccag aaaaatagaa	attaaaaaca	aaacaaaaaa	aaaaacaaaa	aaaaacaaaa	1500
gtaaattaaa aacaaaacct					1560
cagggctcag agatgaagca					1620
taccctttat ttcttctgaa	atcacactga	tgacatcagt	tgtttaaacg	gggtattgtc	1680
ctttcccccc ttgaggttcc	cttgtgagcc	ttgaatcaac	caatctagtc	tgcagtagtg	1740
tggactagaa caacccaaat	agcatctaga	aagccatgag	tttgaaaggg	cccatcacag	1800
gcactttcct acccaattac	ccaggtcata	aggtatgtct	gtgtgacact	tatctctgtg	1860
tatatcagca tacacacaca	cacacacaca	cacacacaca	ggcatttcca	cacattacat	1920
atatacacat actggtaaaa	gaacaatcgt	gtgcaggtgg	tcacacttcc	tttttctgta	1980
ccacttttgc aacaaaacaa	aacaaacaac	attaaaaaat	tgagaacaag	tatggaaaga	2040
atgaaagatc aaggaaaaaa	gaataccaag	ttacatttcg	ttaaggtgct	tatgatctta	2100
gaactatgca acctaatagg	tttgaaactg	tttacctgag	agagaacaaa	aagagagact	2160
tttttgtatt ggaagtaatc	tgattaattt	ttattttctt	caaggagaga	tacttgaaag	2220
gaatatgttt gtccatctgt	tggatccaaa	catttctata	ttttgtaaat	gttgttgttg	2280
ttttttttt aatcgtttac	tatttgcact	acaatggtgt	ttgacctgtc	taatccttat	2340
ttaacaagta ttttctttgg	ttgggggtgg	gggtggggtt	taagagctgc	acttaatgtg	2400
agctataaaa gaactgctac	agcacacaaa	atagctattt	ttattattat	aattataatt	2460
attattatta ttttgtacct	taaaaaatag	acacatacac	caaagacatt	tgtgtgagcc	2520

```
2580
tttaaacagt ctgtctgtgg ttggtatcat tcaccatcaa tgagtcaggg gttgggattc
                                                                      2640
aaqqttqaqt aqtqtqqatt gtgttcaggc ttaaaagacc tgagaagttt ggtttttgac
tccttttaca tccatgaaac aggacatttc atactggatg tacagtagtt gtacactgtt
                                                                      2700
ggatatcaag ttcaatcaaa ttcatggaac tacatgcttg tatgtgtata tatacattgc
                                                                      2760
ttgtgcatat gcatatctgt atgtatatat acatgtattg taccatgtcc atacacattt
                                                                      2820
                                                                      2880
taagcacttc aggctgtcat tttttaatgt tcttaaagca atgaatgttt gtgtgcaaaa
cacagtattt ttaagaagga taggctatag tttttgcttt tactctgaac taggtgggcg
                                                                      2940
                                                                      3000
catttcaaaa attcggatgg gaaaaagcct ggaaattcca gtgaatattc agcaaggccc
tettteattg tacagggate aaattteete etettttttg tgeeceetee eacttetaca
                                                                      3060
                                                                      3120
agttatcccc tgtggggaaa acaggatgat aatcaaaact ctgggctgat gtttttccaa
cttagtgtct attggaatca atcttaaatc agaagctttt tcagaaaaat aatatttagg
                                                                      3180
ccagaattag agttgagtgt atttttaaa aatgattaag gcttggttgt gagaaatatt
                                                                      3240
                                                                      3300
acctgtacca gctgggaaaa ataatgtcat cactaactaa aagataatta atttgagaga
aagtgttaag agagggagag taaggaagag aacagttaag aggaggcaga ggtgagggca
                                                                      3360
                                                                      3420
qtaqtaaaaa tctctaaaat tttaatttac agccaaaatt cttcatgtgt aaatttgtat
tgattcagat gcagaaatga aaaaaaaaca cctttgtttt ataaatatca aagtacatgc
                                                                      3480
                                                                      3540
ttaaaqccaa qtttttatct agtttattct agtacttagc ttgcctggaa tagctaataa
                                                                      3600
attattcatg tatgtgcttt tgaaaatcca gagccctatt tttacacact tgtgtgaagt
                                                                      3660
tqqcaaacat tttqaaaaat qqaaaaaagt ttctaataat tgggaacaat tacattaatt
aatattttgt aaaatattga agettttage eetatgteaa tttgtagatt aaaataaatt
                                                                      3720
                                                                      3780
aattatagga aaggaagata acagtgagaa accaaacatt acaaaaggtg gtttagctct
                                                                      3840
ccttgaaaaa tatactaagt tggtatacta taacacttgg ctatatgtag gcaatgtcac
tactgggcaa atacacttac tgtgttctag aggcagccct ttcttatgca gaaaatacaa
                                                                      3900
                                                                      3960
tacqcactgc atgagaagct tgagagtgga ttctaatcca ggtctgtcga ccttggatat
catgcatgtg ggaaggtggg tgtggtgaga aaagttttaa ggcaagagta gatggccatg
                                                                      4020
                                                                      4068
ttcaacttta caaaatttct tggaaaactg gcagtatttt gaactgca
       183
696
DNA
Homo sapiens
<400> 183
ttccccccc cccccccc ccccgcccga gcacaggaca cagctgggtt ctgaagcttc
                                                                        60
tgagttetge ageeteacet etgagaaaae etetttteea eeaataeeat gaagetetge
                                                                       120
qtqactqtcc tqtctctcct catgctagta gctgccttct gctctccagc gctctcagca
                                                                       180
ccaatgggct cagaccetee cacegeetge tgettttett acaeegegag gaagetteet
                                                                       240
cgcaactttg tggtagatta ctatgagacc agcagcctct gctcccagcc agctgtggta
                                                                       300
                                                                       360
ttccaaacca aaagaagcaa gcaagtctgt gctgatccca gtgaatcctg ggtccaggag
tacgtgtatg acctggaact gaactgagct gctcagagac aggaagtctt cagggaaggt
                                                                       420
cacctgagec eggatgette tecatgagae acateteete catacteagg acteetetee
                                                                       480
gcagttcctg tcccttctct taatttaatc ttttttatgt gccgtgttat tgtattaggt
                                                                       540
                                                                       600
gtcatttcca ttatttatat tagtttagcc aaaggataag tgtcctatgg ggatggtcca
                                                                       660
ctgtcactgt ttctctgctg ttgcaaatac atggataaca catttgattc tgtgtgtttt
                                                                       696
ccataataaa actttaaaat aaaatgcaga cagtta
       184
860
DNA
Homo sapiens
<400> 184
gactctcact gtcattgcag aaaactcttc tacagaaatt actctcaaag aaacctgagg
                                                                        60
atcqacctaa cacatctgaa atactaagga ccttgactgt gtggaagaaa agcccagaga
                                                                       120
aaaatgaacg acacacatgt tagagccctt ctgaaaaagt atcctgcttc tgatatgcag
                                                                       180
```

```
240
ttttccttaa attatctaaa atctgctagg gaatatcaat agatatttac cttttatttt
aatgtttcct ttaatttttt actattttta ctaatctttc tgcagaaaca gaaaggtttt
                                                                      300
cttctttttg cttcaaaaac attcttacat tttacttttt cctggctcat ctctttattc
                                                                       360
ttttttttt ttttaaagac agagtctcgc tctgttgccc aggctggagt gcaatgacac
                                                                       420
                                                                       480
agtettgget caetgeaact tetgeetett gggtteaagt gatteteetg ceteageete
ctqaqtaqct qgattacagg catgtgccac ccacccaact aatttttgtg tttttaataa
                                                                       540
agacagggtt tcaccatgtt ggccaggctg gtctcaaact cctgacctca agtaatccac
                                                                       600
ctgcctcggc ctcccaaagt gctgggatta cagggatgag ccaccgcgcc cagcctcatc
                                                                       660
tctttgttct aaagatggaa aaaccacccc caaattttct ttttatacta ttaatgaatc
                                                                       720
                                                                       780
aatcaattca tatctattta ttaaatttct accgctttta ggccaaaaaa atgtaagatc
gttctctgcc tcacatagct tacaagccag ctggagaaat atggtactca ttaaaaaaaa
                                                                       840
                                                                       860
aaaaaaagtg atgtacaacc
       185
924
DNA
Homo sapiens
<400> 185 cgaccgcgga gcagcaccat gtcggcgccg gcggccaaag tcagtaaaaa ggagctcaac
                                                                        60
                                                                       120
tccaaccacg acggggccga cgagacctca gaaaaagaac agcaagaagc gattgaacac
attgatgaag tacaaaatga aatagacaga cttaatgaac aagccagtga ggagattttg
                                                                       180
aaagtagaac agaaatataa caaactccgc caaccatttt ttcagaagag gtcagaattg
                                                                       240
                                                                       300
atcgccaaaa tcccaaattt ttgggtaaca acatttgtca accatccaca agtgtctgca
ctgcttgggg aggaagatga agaggcactg cattatttga ccagagttga agtgacagaa
                                                                       360
tttgaagata ttaaatcagg ttacagaata gatttttatt ttgatgaaaa tccttacttt
                                                                       420
                                                                       480
gaaaataaag ttctctccaa agaatttcat ctgaatgaga gtggtgatcc atcttcgaag
tccaccgaaa tcaaatggaa atctggaaag gatttgacga aacgttcgag tcaaacgcag
                                                                       540
                                                                       600
aataaagcca gcaggaagag gcagcatgag gaaccagaga gcttctttac ctggtttact
gaccattctg atgcaggtgc tgatgagtta ggagaggtca tcaaagatga tatttggcca
                                                                       660
aacccattac agtactactt ggttcccgat atggatgatg aagaaggaga aggagaagaa
                                                                       720
gatgatgatg atgatgaaga ggaggaagga ttagaagata ttgacgaaga aggggatgag
                                                                       780
                                                                       840
gatgaaggtg aagaagatga agatgatgat gaaggggagg aaggagagga ggatgaagga
                                                                       900
gaagatgact aaatagaaca ctgatggatt ccaaccttcc tttttttaaa ttttctccag
                                                                       924
tccctgggag caagttgcag tctt
       186
1774
DNA
Homo sapiens
gaggcaatgg coggcaacca gotgtaagog aggcaoggaa gacatatgot tgtgagacaa
                                                                        60
aggtgtctct gaaactatgg atggtacaag aacttcactt gacattgaag agtactcgga
                                                                       120
tactgaggta cagaaaaacc aagtactaac tctggaagaa tggcaagaca agtgggtgaa
                                                                       180
                                                                       240
cggcaagact gcttttcatc aggaacaagg acatcagcta ttaaagaagc atttagatac
                                                                       300
tttccttaaa ggcaagagtg gactgagggt attttttcct ctttgcggaa aagcggttga
gatgaaatgg tttgcagacc ggggacacag tgtagttggt gtggaaatca gtgaacttgg
                                                                       360
                                                                       420
gatacaagaa ttttttacag agcagaatct ttcttactca gaagaaccaa tcaccgaaat
teetggaace aaagtattta agagttette ggggaacatt teattgtaet gttgeagtat
                                                                       480
                                                                       540
ttttgatctt cccaggacaa atattggcaa atttgacatg atttgggata gaggagcatt
                                                                       600
agttgccatt aatccaggtg atcgcaaatg ctatgcagat acaatgtttt ccctcctggg
aaagaagttt cagtatctcc tgtgtgttct ttcttatgat ccaactaaac atccaggtcc
                                                                       660
accattttat gttccacatg ctgaaattga aaggttgttt ggtaaaatat gcaatatacg
                                                                       720
```

```
ttgtcttgag aaggttgatg cttttgaaga acgacataaa agttggggaa ttgactgtct
                                                                       780
                                                                       840
ttttgaaaag ttatatctac ttacagaaaa gtaaatgaga catagataaa ataaaatcac
                                                                       900
actgacatgt ttttgaggaa ttgaaaatta tgctaaagcc tgaaaatgta atggatgaat
                                                                       960
ttttaaaatt gtttataaat catatgatag atctttacta aaaatggctt tttagtaaag
                                                                      1020
ccatttactt tttctaaaaa agttttagaa gaaaaagatg taactaaact tttaaagtag
ctcctttgga gaggagatta tgatgtgaaa gattatgcct atgtgtcttg cagattgcaa
                                                                      1080
                                                                      1140
gatattttac caatcagcat gtgttacctg tacaattaaa aaaatatttc aaaatgcaat
gcatattaaa tataatacac acagaaaaac tggcatttat tttgttttat ttttttgaga
                                                                      1200
tggagtttcg ttcttgttgc ccaacctgga gtgcaatggt gcaatctcag ctcactgcaa
                                                                      1260
                                                                      1320
cctctgcctc ccaggttcag gtgattctcc tgcctcagcc tcctgagtag ctgggattac
                                                                      1380
aggtqtqcqc caccacqccc agctaatttt ttgtattttt agtagagaca gggtttcacc
atgttggtca ggctgatctc gagctcctga cctcaggtga tctacccacc tcggcctccc
                                                                      1440
aaagtgctgg gattacaggc gtgagccact gcacctggcc tgacattctt tatgaaattt
                                                                      1500
                                                                      1560
agaattgttg aagaactata acatttcagt agggttcaag gtggtcccaa aagttatata
aaaqattagt ttttactata aacccttgtc ttttactcag atcctagcat cccttttcac
                                                                      1620
atggtttctc catgtatata acagaatcaa gaaacaaatt ttaattaaac aatctgtaac
                                                                      1680
                                                                      1740
agaatcaaga aacaaataca ttttaattaa acaatctata tggaacaaac attcccaaat
                                                                      1774
tctaagaata aatttttctt taagttttct ctga
       187
851
DNA
Homo sapiens
^{<\!400>} 187 gggageteaa agtgtgeett eteggggaea etggggttgg gaaateaage ategtgtgte
                                                                        60
gatttgtcca ggatcacttt gaccacaaca tcagccctac tattggggca tcttttatga
                                                                       120
ccaaaactgt gccttgtgga aatgaacttc acaagttcct catctgggac actgctggtc
                                                                       180
aggaacggtt tcattcattg gctcccatgt actatcgagg ctcagctgca gctgttatcg
                                                                       240
                                                                       300
tgtatgatat taccaagcag gattcatttt ataccttgaa gaaatgggtc aaggagctga
aagaacatgg tecagaaaac attgtaatgg ceategetgg aaacaagtge gaceteteag
                                                                       360
atattaggga ggttcccctg aaggatgcta aggaatacgc tgaatccata ggtgccatcg
                                                                       420
tggttgagac aagtgcaaaa aatgctatta atatcgaaga gctctttcaa ggaatcagcc
                                                                       480
                                                                       540
gccagatccc acccttggac ccccatgaaa atggaaacaa tggaacaatc aaagttgaga
                                                                       600
agccaaccat gcaagccagc cgccggtgct gttgacccaa gggcgtggtc cacggtactt
gaagaagcca gagcccacat cctgtgcact gctgaaggac cctacgctcg gtggcctggc
                                                                       660
                                                                       720
acctcacttt gagaagagtg agcacactgg ctttgcatcc tggaaggcct gcagggggcg
gggcaggaaa tgtacctgaa aaggatttta gaaaaccctg ggaaacccac cacaccacca
                                                                       780
caaaatggcc tttagtgtat gaaatgcaca tggaggggat gtagttgcat ttttgctaaa
                                                                       840
aaaaaaaaa a
                                                                       851
       188
2187
DNA
Homo sapiens
<400> 188
gegeegegte eegeaggeeg tgatgeegee egegeggagg tggeeeggae egeagtgeee
                                                                        60
caagagagct ctaatggtac caagtgacag gttggcttta ctgtgactcg gggacgccag
                                                                       120
agctectgag aagatgteag caatacagge egeetggeea teeggtaeag aatgtattge
                                                                       180
                                                                       240
caagtacaac ttccacggca ctgccgagca ggacctgccc ttctgcaaag gagacgtgct
caccattgtg gccgtcacca aggaccccaa ctggtacaaa gccaaaaaca aggtgggccg
                                                                       300
tgagggcatc atcccagcca actacgtcca gaagcgggag ggcgtgaagg cgggtaccaa
                                                                       360
                                                                       420
actcagecte atgeettggt tecaeggeaa gateaeagg gageaggetg ageggettet
gtacccgccg gagacaggcc tgttcctggt gcgggagagc accaactacc ccggagacta
                                                                       480
```

```
cacgctgtgc gtgagctgcg acggcaaggt ggagcactac cgcatcatgt accatgccag
                                                                       540
                                                                       600
caageteage ategacgagg aggtgtaett tgagaacete atgeagetgg tggageaeta
                                                                       660
cacctcagac gcagatggac tctgtacgcg cctcattaaa ccaaaggtca tggagggcac
                                                                       720
agtggcggcc caggatgagt tctaccgcag cggctgggcc ctgaacatga aggagctgaa
gctgctgcag accatcggga agggggagtt cggagacgtg atgctgggcg attaccgagg
                                                                       780
                                                                        840
gaacaaagtc gccgtcaagt gcattaagaa cgacgccact gcccaggcct tcctggctga
agcctcagtc atgacgcaac tgcggcatag caacctggtg cagctcctgg gcgtgatcgt
                                                                       900
                                                                       960
ggaggagaag ggcgggctct acatcgtcac tgagtacatg gccaagggga gccttgtgga
ctacctgcgg tctaggggtc ggtcagtgct gggcggagac tgtctcctca agttctcgct
                                                                       1020
                                                                       1080
agatgtctgc gaggccatgg aatacctgga gggcaacaat ttcgtgcatc gagacctggc
                                                                      1140
tgcccgcaat gtgctggtgt ctgaggacaa cgtggccaag gtcagcgact ttggtctcac
caaggaggcg tccagcaccc aggacacggg caagctgcca gtcaagtgga cagcccctga
                                                                       1200
ggccctgaga gagaagaaat tctccactaa gtctgacgtg tggagtttcg gaatccttct
                                                                      1260
ctgggaaatc tactcctttg ggcgagtgcc ttatccaaga attcccctga aggacgtcgt
                                                                       1320
                                                                       1380
ccctcgggtg gagaagggct acaagatgga tgcccccgac ggctgcccgc ccgcagtcta
                                                                       1440
tgaagtcatg aagaactgct ggcacctgga cgccgccatg cggccctcct tcctacagct
ccgagagcag cttgagcaca tcaaaaccca cgagctgcac ctgtgacggc tggcctccgc
                                                                       1500
                                                                       1560
ctgggtcatg ggcctgtggg gactgaacct ggaagatcat ggacctggtg cccctgctca
                                                                       1620
ctgggcccga gcctgaactg agccccagcg ggctggcggg cctttttcct gcgtcccagc
                                                                       1680
ctgcacccct ccggccccgt ctctcttgga cccacctgtg gggcctgggg agcccactga
                                                                       1740
ggggccaggg aggaaggagg ccacggagcg ggaggcagcg ccccaccacg tcgggcttcc
ctggcctccc gccactcgcc ttcttagagt tttattcctt tccttttttg agattttttt
                                                                       1800
                                                                       1860
tccgtgtgtt tattttttat tatttttcaa gataaggaga aagaaagtac ccagcaaatg
                                                                      1920
ggcattttac aagaagtacg aatcttattt ttcctgtcct gcccgtgagg gtgggggga
                                                                       1980
cegggeeect etetagggae eeetegeeee ageeteatte eeeattetgt gteeeatgte
                                                                       2040
cegtgtetee teggtegeee egtgtttgeg ettgaceatg ttgeactgtt tgeatgegee
                                                                       2100
cgaggcagac gtctgtcagg ggcttggatt tcgtgtgccg ctgccacccg cccacccgcc
                                                                      2160
ttgtgagatg gaattgtaat aaaccacgcc atgaggacac cgccgcccgc ctcggcgctt
                                                                       2187
cctccaccga aaaaaaaaa aaaaaaa
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 189
ttttttttt tttttcata aatacacaat tttatttgct atttccaggg gaaacttagg
                                                                         60
                                                                        120
cattaaactg taagctgata aaatacgata cctaaaaaag tataaaagta taaatatccc
                                                                        180
cttagaataa attttagtga attaagtctt aatatcttta aattaaaaaa accacaagcc
tatctactat gtcaaggtca aaaatcaaac aacgctaagc ggccancagc tccccagaga
                                                                        240
                                                                        257
ggatgcccag gagcccc
       567
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 190
tggaataatg gcaacagaaa gactggctaa ctacaccgga gcatctatgc naataccagg
                                                                         60
```

<210> 194

acaccacata tataaaccat gtcgtttccg tggctggagtactggat tgtccggaat tcatggggtg aaccatgatcgtgacca gcacctataa ggatgggaag ggcgccaccatgtacat ttggggaccc catcgtttaa ggccatgaaaaggcatg gtgacccatg gaccagaggg gatcctagggaggaact ggggtggcta tcaatattgg atggcga	gggg cngagagagg ctggctgagg 180 agat acaaccttgc catcgaggag 240 gtca ctagaagcgc agttttaaga 300 atgg ttatgtgtgc caggctggct 360
gtgttcctga gagttgaaag tgggatgact tatgaca caatgatgca gtcagccacc tggtgaagaa gtgacct ctcagtcttc ttcagcagag gactttn	actt gcacagcatg gctctgctca 480
<210> 191 <211> 456 <212> DNA <213> Homo sapiens	
catatataca tgcagtctgc ttgattatca gcaaaat cttcatgtgg agttcatctg catgtggccc ttactct cacagtctgt ctgtcttcca gttcatctca gtcctcgcttccact ttcctttaac catgggttgt gtgagcc ctgcttccac cagggtggag gcttctaggt ctgcatggagggtggct ctgggagcag ttgtgctgcg ggcttgcagaaacagag cttcatggct tgcttaaatt acttaggaatgtgatgt acaaagagag tatgccgatg cattcc	gaa gcctcttcct gatctggagc 120 gaga aaggcccttt aaatatgtca 180 gaga aagagctttg agaaagatgg 240 gatg atggggcccg tttctggcca 300 ctgg gggagaactc taactgttgc 360
<pre>&lt;210&gt; 192 &lt;211&gt; 485 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 192 ttttttttt tttatttttg ctaaatttta ttttcaa	
ttttattttt taccccaaaa aaggtatcaa tacttti ccaaagcctt ctgagctgca gtcattttgc tatttti	
tattaaactt agtgtaatct tcttttgctt ctacagg	
ttgatggagg atttggcaat gaggctgaag gttctgg	
catcacttaa ttctttaggg atgtagtcag atatcag	
tcctcttcct tgtcagtgga agcttggtca ccagaga	
gaactggaca ttcacattat tgggntttta atgctg	ccac agtttgatta accntttttt 480
tccaa	485
<210> 193 <211> 297 <211> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 193 cttttttca ggttaaatat ataattncaa gtgctt tagggagcaa aaaataagtn agtnctgctt ttagtta tagtacactg catggtattt aatattccag gaagcat ggcacatgaa ataatagctc taggaaaatg cgcatca catttcttac aactgtgatg tttgcttaca taaaag</pre>	agtt aaccttgttc ttttcttaaa 120 tggg atttnatttt gcttgatttg 180 ttaa tgactctttg taaagagagg 240

```
1522
DNA
Homo sapiens
ààaagaggaa accaacccct aagatgagct ttccatgtaa atttgtagcc agcttccttc
                                                                         60
                                                                        120
tgattttcaa tgtttcttcc aaaggtgcag tctccaaaga gattacgaat gccttggaaa
cctggggtgc cttgggtcag gacatcaact tggacattcc tagttttcaa atgagtgatg
                                                                        180
                                                                        240
atattgacga tataaaatgg gaaaaaactt cagacaagaa aaagattgca caattcagaa
aagagaaaga gactttcaag gaaaaagata catataagct atttaaaaat ggaactctga
                                                                        300
                                                                        360
aaattaaqca tctgaagacc gatgatcagg atatctataa ggtatcaata tatgatacaa
aaggaaaaaa tgtgttggaa aaaatatttg atttgaagat tcaagagagg gtctcaaaac
                                                                        420
caaaqatctc ctgqacttgt atcaacacaa ccctgacctg tgaggtaatg aatggaactg
                                                                        480
accccgaatt aaacctgtat caagatggga aacatctaaa actttctcag agggtcatca
                                                                        540
                                                                        600
cacacaagtg gaccaccagc ctgagtgcaa aattcaagtg cacagcaggg aacaaagtca
                                                                        660
gcaaggaatc cagtgtcgag cctgtcagct gtccagagaa aggtctggac atctatctca
tcattggcat atgtggagga ggcagcctct tgatggtctt tgtggcactg ctcgttttct
                                                                        720
                                                                        780
atatcaccaa aaggaaaaaa cagaggagtc ggagaaatga tgaggagctg gagacaagag
cccacagagt agctactgaa gaaaggggcc ggaagcccca ccaaattcca gcttcaaccc
                                                                        840
ctcaqaatcc agcaacttcc caacatcctc ctccaccacc tggtcatcgt tcccaggcac
                                                                        900
                                                                        960
ctagtcatcg tcccccgcct cctggacacc gtgttcagca ccagcctcag aagaggcctc
                                                                       1020
ctqctccqtc gggcacacaa gttcaccagc agaaaggccc gcccctcccc agacctcgag
ttcaqccaaa acctcccatg gggcagcaga aaactcattg tccccttcct ctaattaaaa
                                                                       1080
                                                                       1140
aaqataqaaa ctgtcttttt caataaaaag cactgtggat ttctgccctc ctgatgtgca
tatccgtact tccatgaggt gttttctgtg tgcagaacat tgtcacctcc tgaggctgtg
                                                                       1200
ggccacagcc acctetgcat ettegaacte agecatgtgg teaacatetg gagtttttgg
                                                                       1260
                                                                       1320
tctcctcaga gagctccatc acaccagtaa ggagaagcaa tataagtgtg attgcaagaa
                                                                       1380
gtgtagagga ccgagccaga aatcttagag atttcttgtc ccctctcagg tcatgtgtag
                                                                       1440
atgcgataaa tcaagtgatt ggtgtgcctg ggtctcacta caagcagcct atctgcttaa
                                                                       1500
gagactctgg agtttcttat gtgccctggt ggacacttgc ccaccatcct gtgagtaaaa
                                                                       1522
gtgaaataaa agctttgact ag
       195
408
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 195
atcgcttgag gccacgagtt caagatgagg ttggcaacat agtaagacct catcactaca
                                                                         60
atttttttt ttttaaatta gtgaagtgtg gtactgcaca cccgaagtcc cagctacttg
                                                                        120
                                                                        180
ggaggctgag gcaggaggat tgcttaagcc cagaaatttg aggctgcagt gagccatgat
tgcaccacta tgctccagag tctaggcaac agagtgagac cttatctctt taaaacaaac
                                                                        240
aagaatgaag ttaggtatct gtttatttgt ttgagccatt tgtatttcct tttttgtagg
                                                                        300
actgtcctgt ttnaaacgtt aaaatcactg ctgtnggttt tngattttta catctcagct
                                                                        360
gggatgggca ccaattaaat tatttnaggc cctggtttat tgnaaaat
                                                                        408
       196
382
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400>
       196
```

```
actcctcttg ctcgtcatgt ctggccgcgn aaaggcggga agggtcttgg caaaggcggc
                                                               60
gctaacacgc gtnaaagtac tgcgcgacaa tatccagggc atcaccaagg ctnacatnnc
                                                              120
gcactttgct cgccgctgcg ctgganagcg attctccggc ctcatctacg aggagactcg
                                                              180
eggggtgetg aaggtgttee tggagaaegt gateegggae geegtgaeet atacagagea
                                                              240
cqccaaqcqc aagacggtca ccgccatgga tgtggtctac gcgctcaagc caggggccgc
                                                              300
accetettae ggtttteggt ggttgagegt eettttetta eeaattaaaa ggeeettttt
                                                              360
cagggcaacc ccttaaaaaa aa
                                                              382
      197
839
DNA
Homo sapiens
      misc feature
n=a,t,g or c
<400> 197
gnnnnnngnn nnnnnnnnt tnttgagnac cgcagtngca gcagcagcag ccgctgncgc
                                                               60
aaacaagccc tcccacgttt gaggggagtc atgagccgtt tcctgaatgt gttaagaagt
                                                              120
tggctggtta tggtgtccat catagccatg gggaacacgc tgcagagctt ccgagaccac
                                                              180
acttttctct atgaaaagct ctacactggc aagccaaacc ttgtgaatgg cctccaagct
                                                              240
eggacetttg ggatetggae getgetetea teagtgatte getgeetetg tgeeattgae
                                                              300
attcacaaca agacgctcta tcacatcaca ctctggacct tcctccttgc cctggggcat
                                                              360
ttcctctctg agttgtttgt cttatggaac tgcagctccc acgattggng tcctggcanc
                                                              420
                                                              480
cctgatggtg gnaagtttct ccatcctggg tattgtggtc ggctccngta ttttagaagt
                                                              540
agaaccagtt ccagacagaa gaagagaact gaggcagaat atcaacccca gggtggatca
antgggttac aagtggttna aaannnnnnn nnnnnnnnc nnnntnntnt naannnnnnn
                                                              600
                                                              660
720
                                                              780
839
      198
470
DNA
Homo sapiens
<400> 198
cgaaaaaagg aacaaagcgt tactgaaaag aaggtaacct ttgttggatg tgggccttag
                                                               60
                                                              120
ctccaggtcc agactactac tctatgttct ccagaagggt gctaagtcac ctactgaaga
gagaaccaac tgactttcct attgactcat caggaaccag tcctcagtct ggtcaagttg
                                                              180
tttcttattt gtgagcagtt caggctatct cctgatgggg atgaggccaa ggctttctta
                                                              240
                                                              300
tettttggtt gtetetgett aatggaggag eetggeetag gatggaggee tggettagat
ctttcattcc acctcaggaa tgaggttgtg atctttcctg tcctgaccct ctctgaatta
                                                              360
tgtttcaata gtactcttga ttgtctgcca tgttgttgaa gcaaatgaat tatttttaaa
                                                              420
470
      Homo sapiens
<400> 199
cctcttgttc tctgcagagg atcagctggg cctgtccctg ctcagcctgg agcagctaga
                                                               60
atcaqaqqaq acqctgaaqa ggatagagca gattgctcag cagctctgag tggggcgggt
                                                              120
ggggccataa acggttcctg gtgactcctg agtcttgcct ggccctggtt cccagcggcg
                                                              180
                                                              240
gtggtgctag aaggtcttat gaagtcaggt gacatttctc actgtcacgt ccacagcctt
```

taatcgcagg agaaggcagc tatccaccag gtacc

275

<210> 200 <211> 738 <212> DNA <213> Homo sapiens	
<400> 200 aatacagcgc attcaacttg caaacaccct tccactccca caaagagcaa gctgtcactg	60
gccaatcaaa acaatgaacc ataatgaaac agtttttctt gctccaccca ctcggtgacc	120
aaatttgaaa aaaaaaaaa accgcgccaa ctcatgttgt tttcaatcag gtccgccaag	180
tttgtattta aggaactgtt tcagttcata ccttccactg cgataggaat catgtctggt	240
cgcggcaaag gcggaaaagg cttggggaag ggtggtgcta agcgccatcg taaggtgctc	300
cgggataaca tccagggcat tacaaaaccg gctatccgcc gtttggctcg gcgcggtggg	360
gtcaagcgca tttccggtct tatctatgag gagactcgag gtgtgcttaa ggttttctta	420
gagaacgtta ttcgagacgc cgtcacctat acggagcacg ccaagcgcaa aactgtcaca	480
gccatggatg tagtatatgc cctaaaacgt caggggcgca ctctgtatgg cttcggcggc	540
tgaatctaag aatacgcggt ctcctgagaa cttcaaaaaa caaaaaaacc caaaggccct	600
tttcagggcc gctcacaaag tcgtttaaag agctgaaatg cgttgcgaga atgagtttgg	660
atgacagaaa taaccgtgac agcctgcata agaatgaatt gtgtttgcca tgaccggcca	720
cactgtgaca aaatttca	738
<210> 201 <211> 446 <212> DNA <213> Homo sapiens <400> 201 aactgaggca tcatggcagt ttaatagtga ggtatttaat tgcattttta taaaaaacat	60
tgcaaaacaa agtgacaata gggacctaaa ttctttggac ttacggtaga gatgcttgag	120
gatcctaata ttctacttct gccaacatgt caggtaggaa gctcacaatg ttccccataa	180
gccattacaa actggctaag gaaaatcagt catgactaag teettgtetg catcaegete	240
ctgccctcc acacactgtc tgagcgtgca cttttctttc gaaggctaat ttatgaggca	300
ttctgcctga gtcagggcta ttgctaagtg gaaggtttga tgaacctccc agtagaaaat	360
gcaaggcctg caaaaatgcc gaacagctcc gatttactat gggcttataa tcaagggcaa	420
actatacaat aagagggttg gtattt	446
<pre>&lt;210&gt; 202 &lt;211&gt; 469 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 202 actgtgataa aacatacaca gtttacaaga atatgaaatg ctttactaat tcgtgtgtca	60
tccatgctaa tcatctctct attgttccaa ttttagtaca ggtgcttttg aagtgggcac	120
tcttaatttt ttgaacattt tctaggtttc tgataccata ctcattctgt gtcttaccta	180
tcacaacccc agaatcagcc atttctccaa attcctttta gtggagagtg gtatttagaa	240
accaggatet ggacaccatt tetetttttg ttattgttgt ttgcettget ttaatgatag	300
ctctttttat taatttttcc attattataa aagatggcca aatacataca tttctatgga	360
aaatgaatca agtcttatnt attttacagt taaaatttca ttattcctat tttaactgat	420
aaaccagttt aattttcaag atgtattaaa gtctcccaca attgtattc	469
<210> 203 <211> 442 <212> DNA <213> Homo sapiens <220> <221> misc_feature	
<223> n=a,t,g or c <400> 203	

<220>

```
60
qqtqttccct qaqcqqttqc tqcgggtgat ggatactctt ctgatactgg ctcttcgtgc
tataatttct tttctcacca agagcaggtg ccctttcaga agggaatggg antngaggga
                                                                         120
qqqtcacaqa aacacctcgg cactggggga aacgtggcct agcctctgng ancggcganc
                                                                         180
agcggccgga anactggtgg gctgcgggcc ggcgcgggtt cannaggctt ctttttccgc
                                                                         240
                                                                         300
qqacqqaqac actnqtacaq cccaagtctc gagnaaacgc caacgccgac gccttctcca
acaaaaqatq gcctcggact caagagtgcg gctccagggc aatgcagccc caacctaaag
                                                                         360
atttagaggc ctcccgtttc gctggccccc agagccgncc accgcgactg cacttcccca
                                                                         420
                                                                         442
ncgataaaag gtggtttcca an
       204
428
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<\!\!400\!\!> 204 ttttttcag taatacagat gtctatttta ttaaaaaagt tacaaacagg tggactgcag
                                                                          60
ggtcgtctta caaaatgaca agaatgaaat ctattggaaa aattttactt ttacaaatct
                                                                         120
ttataggtaa ttgttcaatg tttgtacttg ttatttgaga ttttaccttt cactgataaa
                                                                         180
                                                                         240
qttacaqtac attagatcca tgataatagg ttacattatt ttatttgcag agccctactg
cagtgatttg aacaactcct aaatagatgc cataataaag acaagacata tattgcattt
                                                                         300
aatattaatt tattatccta ataaqcaaca tqcaatctat tqaqqaaqct aaaataactt
                                                                         360
                                                                         420
ttggtcccct ttcttaaaat gtgctggaga aaccaccctt aaaatcactt tcccccggat
                                                                         428
tccngcga
       205
413
DNA
Homo sapiens
<400> 205 tacagagaat ataaaaatac attcacttta ttttagaaaa atgaagactc atagagtaag
                                                                          60
cttatcacaa actggcctat taggagtcac agaattcaca ggaaacaatt tctgaagacc
                                                                         120
aggtgcctgc tgccacctct ccaagcaggc cagagtccag tagagaatgc gattcaggaa
                                                                         180
gatggctcct cagagggcag ggaggttagc tacggaggcc gctcacgtgg aaatgtccag
                                                                         240
                                                                         300
tgaaccaatg ccaaggaaga agataaaatt ctctggggct gaccacaaca gtgggggtgg
                                                                         360
ataaagacaa accacttgcc tgtacttctc atcttctatt tgttcatttc actgctggaa
                                                                         413
ggtgacctct tttcccctaa tcttctttca acccagagag tttaagtctt ctc
       206
422
DNA
Homo sapiens
<400> 206
tgatgcttgc agagaacccc aataacttga tcttcaagac gggaattact tctgattaca
                                                                          60
ctctqaqaat atctqtcatc tqcctttgac accttataag ttgattcttg agcattaatt
                                                                         120
tctccatcag atagcctttg ggttgatgac tcaagagatg cttgtggctg caacacctgt
                                                                         180
aactettgca ttggaaaace atettettge tttgaagatg gatacacate tgagtcaage
                                                                         240
tttctttcag cataagactt tgggtcaggg gaaagttatg ttattttgta atgtctgaca
                                                                         300
                                                                         360
atqagtagaq ggatgcaaaa agattgatga ctggacagca ggcaaaaact tctgggactg
ggggagatga tgactcttga gtctgaacat tttgggaaga atgcatagaa atataattct
                                                                         420
                                                                         422
gg
       207
388
DNA
       Homo sapiens
```

## misc feature n=a,t,g or c <400> 207 aagattatac gaangattta ttgatactgg ttaacatcca ttatatacag gtagaaactt 60 tcaaaattqt acaaaqaacc attaaqcata ttqataaaqa caqttttaca gacaaaacaa 120 ctggaaaata gttttaacat acacaatata taattatgaa aaaaatgtag aacacatatt 180 qttctaccaq ataaatccca aggttattaa aagtctgcta tgcagacctt taagttgaaa 240 aatqtqttca atqqaqttac atqqttttag aaaattaagt ataatgttaa aattaagctt 300 ttttttctca ttgcaatttg ggagaggaac tgagacaact tttttacccc aaatctatac 360 aqtttqaaaa ataatttata tgtctagc 388 208 421 DNA Homo sapiens misc feature n=a,t,g or c $^{<400>}$ 208 tttttntntt cattgctcag gtaagaattt attaagtcaa tttaaactan acattactac 60 cattqcaaaa qcatttqctc tqaaaaqqqa ctgaaaaatg catcataaag ttacatagtt 120 cagcaacaat atcaatattg attatataaa gtaaaactac tggcaaacgt catttaagct 180 240 taccctgtaa tttttaataa ctttataagg agcaaatgtg tcaccttaaa aatgtaccag tqqcatttac aaattccttc aaactcattt acaaatacag taataaaaat tcctgagctc 300 360 ccttttctta caccagtatt caccaatcaa catccatqcq qtqttttatt tqacccacat cctctttcct tttcttaaga aaatatttta tcacattcgt aaaagtatct gtgcttcang 420 421 209 211 DNA Homo sapiens <400> 209 tittittitt tittittac cattattigt taattitatt tigatittia aaaggcatta 60 ttcaqtqtac aattaacaaa qaaatcaqtt ttctactcta ctgtacttag gatgcttcaa 120 aaacatcagg tgaaatgatc tatgctttaa gagccagaaa actcaggcct cagcaactaa 180 aacagagaat tccaaaattg taattacaaa t 211 210 415 DNA Homo sapiens <400> 210 ttcttgcttt ctttaaatct ttatttaaaa gtccatgcta ataatgtgtt tacattttta 60 caqttacatt atgatagaaa ctgttggatt ttttaaatat ctaaaacaat ggcccactga 120 agaaaggaac aattaactct ttaattaatt ccttaggata aatacccaga aatttaacag 180 ctagggcaga cttctaatac aataccgaaa gtccttccaa aaaccaagtg gttgccaact 240 tatgtccctt agcattataa cattcttgag ccaatagtgt aaaaatacgc tgacaatttt 300 ataggcaaac attactcaag gtatcttact ttccacttat tactaaaggt aattaacccc 360 taaatagatg ctcctcaaca gtgggactac atcctggtaa acctatcata agttg 415 211 637 DNA Homo sapiens misc feature n=a,t,g or c <400> 211

```
qaattqtqaa qctqtttatc aaatqtttaa qaqaatttac acaaqaatqt tttqacccca
                                                                         60
caaaaaataa tgtgcctaag ctttaaacaa aattcacatt ttatttagat tgaaataaac
                                                                        120
tatacaaaat tgattttctt caccaaaaat aacagcaata ttttccatat ttttctagat
                                                                        180
aaaccacaac acttattttg taggttttcc aggttttgct tataaatcaa gatgaggcag
                                                                        240
tatataaqaq tcatqqaaaa agacagagaa aaaaaacaga caaatcagtt gtcagtatcc
                                                                        300
                                                                        360
atggcctctg attctgtctc aaccatgaaa cagaagtgtt caacatatac ctgctaaaaa
gcttaggaag atgtaggctc cacaaaggaa tgtaaacagc aacgagatgt ggaacaacag
                                                                        420
caggetttte catteaaact ttgteatttg ttteetttaa gtteaagaaa gaecaaatet
                                                                        480
acactggaaa teeetgtttg ggtgagetea caageetttt eteegggtaa ttteetgtaa
                                                                        540
ctgtccaggt atagatttta accatacctt aaaactccct attagtcaag gnccaattgt
                                                                        600
                                                                        637
qqqcttcncc tacacatttt ataaatggta tccctcc
       212
261
DNA
       Homo sapiens
       212
gagggaaaga caaaacgtat ttattccagg ccaggtctta aaatgcacac tgcacggttc
                                                                         60
cctgttgtta tcagcaccag taaggaaaga acgtgcctta acggcagccc cacccagagc
                                                                        120
ctqctqcqtq qctqctqtqa ggctccccat gaatccacgc agtcttcttc ctcactggtg
                                                                        180
cagttggtga ggttttctac cctcacagca aagggatcct taactataaa ttcacggtat
                                                                        240
                                                                        261
qcaqaqaaqa qqacagaatc t
       213
445
DNA
Homo sapiens
<210>
^{<400>} 213 tttttttatt gttttatagt tttattttt ttaaatgaca gttacaagtg cttttccctt
                                                                         60
gatgggcaat gacgtaacta ttttcagtta ttagtaatgc cttaaaaagt aacagcattt
                                                                        120
                                                                        180
tqtctaaact qaacttatat aattqcacaa aagtcatgga aagcattaag aaatgctggt
aaaqattgaa qttttctcag attcttgcgc aattccaaga agccttgatt ccagtgggtc
                                                                        240
ctctgattca aacaataatg atgctcaaac tcagtgacac acaggtagag aacagcagca
                                                                        300
                                                                        360
caaccaggag aacccatgtg gtttgtaaca gtgaaattct gctctactgt taaggtttaa
                                                                        420
tgatgcattc attcatcttt tcattaggag cataaaaaac acctcaaatt atattttctc
                                                                        445
aggettaaaa ettgttttga getat
       Homo sapiens
       misc feature
n=a,t,g or c
<400>
       214
gagcacaaag gtccacttta cttacatgaa ggaacataaa ggcatgagaa acagtcatct
                                                                         60
caataaatgc aagacatgag cataaaagag gttctctgcc tttccagcgt tgttattaca
                                                                        120
                                                                        180
gagagaaacc tacaattatt ttgttaaaca aaattcaagg ctccaggact catctctgga
                                                                        240
gctgatatgt cttaaatact attatagtag gaaagggaga ggagaaaatt ccccacccac
tcccccgatt tggcccgtgt agettccctt tgagggtgtg tgacttgcca tctgcaaaag
                                                                        300
                                                                        360
tcatggccaa aacaggaact aacaggccaa actaccatca atctagtctt ctacagcacc
ctaacaqaqt qccaqqqtcc tctgtcncct ccgcacctga ggncaaagtt ccaggaagtt
                                                                        420
tactgccggt gttaggaggt gagctcaagt tcagtgtctg ncttct
                                                                        466
       215
446
DNA
```

Homo sapiens

<400> 215 tctgaaaatc agccttttaa	tctagttgaa	cccaacgagt	ggggaaagaa	ctaaaacatt	60
tttttccctt cagattttga					120
actgacatcc cctatgtcct					180
aaagaatttc aactcatgtg					240
ctctacaggc acacatattc					300
tgtaaaaaaa tccatccaag					360
acaacatcag tcaactcaca					420
aaattacaaa tggcagagac		gg-5			446
	0030.30				
<210> 216 <211> 465 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 216 ttttttttt ttttttcta	aatgaagtgc	ttttaatttt	cagaccaaac	atttttaata	60
taaaaacatt ttgataatat					120
gaccagggca cagagngggg					180
ttccctggct tgaaatcacc					240
ngggtccctg acctgggccc					300
caaccatggc agcctccagg					360
tgattgacag gaaaggcaac					420
gctgctggat tgaagaggac				555-555	465
5005005540 0544545	••••••••••••••••••••••••••••••••••••••		55		
<210> 217 <211> 315 <212> DNA <213> Homo sapiens					
<400> 217 ttcgaaacct aaaaatgtat	tttattttga	agttgtgctt	tggattttcc	ccaatccaac	60
atctgttgag tgacagtctt					120
cagttatcaa cactatttta					180
acgccacaac attgcgattc					240
tgcaccagcc cttccagtgc					300
ttggggagaa gccag	ccegcgcacc	0099090099	caccaccgcc	00000000	315
					0.10
<210> 218 <211> 382 <212> DNA <213> Homo sapiens					
<400> 218 tacatgtata ttatttattg	ttgattctgt	acaccaaatg	gattacaagc	agcatccagc	60
agaagacaga ccccccaacc					120
tagaaatctg taaatgcatc	gccaagcact	ggggctgatt	tgcagtaatt	ctctaagcaa	180
ggcaaacatg atctagcttt	gaaggcagca	tgaaggcagc	gggttggtga	gaacaatctc	240
tccttaagag aagaagatac	ctggggcgga	aggagttttc	cccggaagtg	gcttgcagcc	300
caccctctct gaaccacagc	catggcttcc	ttcccaaggc	cactgctggc	ttcccaacaa	360
cgcagattca gttctgactg	tg				382
<210> 219 <211> 323 <212> DNA <213> Homo sapiens					
<400> 219 cttcacacag taagatcagt	gtttgctaag	tgttatcagc	caatgtacag	cacccccaa	60

caccgtcaaa cgttgttcca gttattttac tttaaaagag gatttaaata atgcgacgtg	
ctttccactg agccactaag taggtgtgga cgcacaacct tcaacactaa ttgcccttta	
ctaagccgac cagggctaga cactaagcca gaaaagcctt ttccagagtt tcctcttccg	
cacaaaagct ttccttctgt cactccaccc aaccacccag ctcctccctt aagtgtttga	a 300
aagataattc tataagtctc ctc	323
<210> 220 <211> 416 <212> DNA <213> Homo sapiens	
<400> 220 ttttttttt caagtatatt tactctttat tgcattcctt catttgcatt aaacaatatt	60
ttttcaatac agttttggac aaaacacaaa gacattaagc tcatttaaca agagacataa	a 120
gttaacacaa tgtgtgctgc tttcatgagg aggaaagagg caagatctta gaggaatcca	a 180
ggatactggc caccaggaat cacaggatct cacaatacaa tccacttctt taaaagcca	240
aaaataagct agggaagaaa acccaaaaca aagaagatat gacatccaag tctccaccaa	a 300
aagtatacaa atggcaagat ttggagatga tctgctttct cacatgagga caaataacag	360
aggagccaca cccaagtgcc actgtggcca caagcctcat gggtggcgtg tgaggt	416
<210> 221 <211> 388 <212> DNA <213> Homo sapiens	
<400> 221 ccgaggette agttetgtae catttaatge gtgeaaagga catteeatgg tgtetgetg	g 60
gttcagggca actggctttc ccaaggcata caagaaaagt tggcagaaag tcctcccct	
taaaattcaa gcctgaaggt tttgtgtggg ggcctactgc ccctaatgtc ttctggtga	180
actgcagcac agtccatcaa aatagtttgt ggttttgcca tctgttactc cttatgccca	
cctggagagg ggctagcatc tttaggtggg accacccctg gcacaacatg gtctctgag	
tccagatact ctgagggtag gggctggctc tctctgcctc cctatcccct acaagaggg	
cagggagagg tagaacattg ggatcttt	388
<210> 222 <211> 353 <212> DNA <213> Homo sapiens	
<400> 222 gttatttaag gatttgttta atgttttaaa attcaaagca ctttaaatta ttttaagac	a 60
aaagattaat aaaaacaaca ttacctttca aatacaactt tataacagca cagtggaag	a 120
atggtaaaca gtccctcttt tttttaaaaa aaaatcagta cttaaaacca aaggaaggc	t 180
tatatgtaca gctaattcag aaagggaaca atgacaccta aagacataga taaatgctt	240
attttaatcc aataaatgtc ctacctactg gatcttaata atgatgtttt caatatgcc	a 300
tttaaaataa actatccttg aaaataaagt tttaaatcat tcaatataat cta	353
<210> 223 <211> 366 <212> DNA <213> Homo sapiens <400> 223	
ttttttcata atgatttatt tagataacaa acattaatgt gaaacataca ggctattgg	
aaccactatt ctaaaattat gtaagtacaa ataaacatac tgaaatgtgt gcaattcta	
gtttttaaac cagaagattt ctacactaac acacatttat attaatgaca cataaaaaa	a 180
ataaaaactt tattacaaaa ataagttaca ctcgcctcca gcttacagta taaaacaat	t 240
ttatttgcag gaatgcaaaa tgattgtttg ccatgagcat tttgaacata tgacatgtc	c 300
gattttcttg ttaaatttgc atttactggg gaactggtgt gtataaaacc ttaattaag	t 360
ataagc	366
<210> 224 <211> 535	

<212> DNA <213> Homo sapiens	
<400> 224	60
attgataaac acagtaaata tattttctct tccttatgat tttctaagta acattttctt	120
ttctctagct tactttaaga atacagtata caatatatat aatacatcag tcaggctccc	
agtcaataac aggctactag tacttaagac tttggggaat caaaagttat atgcagattt	180
ttgactgtgc ggggcgtagg ggtgggtcag tgcccctacc acctgcattt ttcaagtgtc	240
aactatatat atgtatgtgt acatacacat acacatacac acacacaca acacacac	300 360
acacacacac acacacacga gtgtattaat tcctcagaag cccagccagg catcttagct	
tggctacttt ttaattagaa acaactattt tattcagaaa agtatacaca gttagcaatt	420
agaatettet tatatacaga cataacttge agaaggttaa gtetgaggae getgttetgg	480
gtaattttta cagtcctttt tagctctaag atccatgaca ctgcattttt atggc	535
<210> 225 <211> 337 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 225 ttttttaaa attaatcaac caacacccat tctatttaag gttccaaaag gaagtagctg</pre>	60
gaccoggotg cagacacact cocaccttgc ttctgtccca aaagtacatc coctacgtgt	120
ggttctcctt aaacaatttt aatgtctggg ttggggaagc aggtagagcg cgtagaggca	180
gctgctagag gctggttgct gactccaggc cgcgttccag gaaatatcgg tgggaagaac	240
ggggacgggc ttgggaccct tcattgagga agtaggatgt gatcttcctg agtcctcct	300
gattetegga tgetgagtee teccatataa catette	337
<210> 226 <211> 451 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 226 acaagatgcc acttgcatga tgctgtgggt gccttttcat tgcaatgcct ccatttcaga</pre>	60
tgtgagaaag ttctgggcct gtagggcatt tcaagcctag gtgtgtattg tggaggaggg	120
gatagatgtt catctatgca ccagatcctc agatccccga ggtgggttgc ggggaaggcc	180
cagggagctg atggataaag ccacagcttc agtcctggca gagttcactg ccaggaatgg	240
ctgctgactg cggggcactg atggtgggca gccagggccg aggtgcaaac ttcttcccac	300
aaggagttcc aggtgttcag tggcagccag ttcctcagtt aatgggtcac ctgctgctgc	360
ggccactctc tgttgatgca gtaagccggt tgaggggcgt caaggggctg gacaggacac	420
cccgcaaact ttccagccat tcctgctgtt t	451
<210> 227 <211> 423 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 227 acattcagat gtttttactg cttgattaca tttcttggtt tcacatttaa gacttcaatt</pre>	60
tataagaagt aaattatatg tttttcaatt taagaacaga tgaatgcagg aacattatga	120
acattatgtt ggggaaaaca aagagacccc aaattaaaaa acaaaacaaa	180
actagttgtg cagctctgga gaacttaata aaaagtaaat caacttttaa atcagttaac	240
tttggcgtct gaatacaaaa tgtttatcag tattacctat gtagatgact attaagggat	300
gtgcagcatt ttcaaaatcc ctgtgtgtcc tttgtatgca tgtttggtac actgagttct	360
gtggtcactg tcctctcttc agcagggttt ttttacccca gtacgattgt ccatctctgt	420
att	423
<210> 228 <211> 385 <212> DNA <213> Homo sapiens <400> 228	
tgtgatgcag catcaggtgc ttttacttca gtgaatgaaa aataatggtc acaactcaaa	60

```
tgaatgggaa tttaatatga atatatgcac cttaccagag atgtttgcta ccaatgatat
                                                                          120
                                                                          180
cttagcaatt ccatattcct tacaaagtca gtataattgt tgtaaaaaaa tcaactgtgg
ttctgaatac ccattcacag ttgacctcaa caatgtatct gatgtaggag actgagtatc
                                                                          240
                                                                          300
cqtqacaqqc agaaqcatgt gatggtcctc agtcccaagt ggaagagcta atggtaaagt
catatcagaa ggcttcacat ccatagtttc tgataaagga cttttttgta tggaatcctg
                                                                          360
                                                                           385
ttcactcaaa gtatgatcct ctgca
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 229 gtggaagaat acagaaatat gtttaatact tagtatcaaa ctaaaaagta atataaaatt
                                                                            60
acaaaacttc tttttttca tgcacaggct tttnctggta aggaccgctg ggattgaaca
                                                                           120
gaagetteeg gtaaataagg geeeegtegg caagacagea tactgetgte acaagtgeaa
                                                                           180
                                                                           207
acacccctcc accaactgtc aatgttg
       230
351
DNA
Homo sapiens
<400> 230 aaaaatggta ttcattttta tttcaacatg tcaactgtgc atttccaaaa cagcaggctt
                                                                            60
                                                                           120
ttcaaaqqaa taaatcaqaa ctgtaaacac aagatacagt acaagttttt gacttcctac
agtcagtttc acaaatccac atactgtaca ttcataggtg aggttaagcc tgtcacccat
                                                                           180
ttctttattt ctataattac acaagcataa taaatacatc tgattttaaa ggtcacttaa
                                                                           240
aatgagtcat aatttacagt acagtacgtt tcagttcaag tgcaaaaaat aactatttgc
                                                                           300
                                                                           351
tqaattctat ttctttcagt tattttattt ttaagctgtg ttttattgtg a
       231
318
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 231 ctgggtgcaa ggaacatttt attccataac tgtctccacc gaagccgcag aagcaaagcc
                                                                            60
aggagcagaa tecattetge cagegetggg etetggggag acatetgtge ceteaceatg
                                                                           120
                                                                           180
gaggacagaa ggcaggggcc tcccgactcn ttggtcctgc ctggggtgct cctgtccctc
                                                                           240
tttnttgctg ggggacctac cccaccntcc ccctcccacc tcagtcacag aggaacaagg
                                                                           300
gagacaaact gagggctctg cagtccccgt tcaaggncaa cataatagtc gtgtggcccc
agcccagcta ggcgcatc
                                                                           318
       232
228
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 232 gaaaagaaat ctattttaa tggctttggc tttatagcac gaagcaggca cccnctcgtt
                                                                            60
aaaggcacac agtcctctct tctgccccac ctcctgggtc cttaaaatcg agtcctgagt
                                                                           120
                                                                           180
tccagagggg tcactgcaag gcagcaggga agggagaggg tcacagtttc actctgtgag
                                                                           228
tatcagacac ccagggccaa ggcccagact ggcctctgaa gctaaagg
```

<210> 233 <211> 479 <212> DNA <213> Homo sapiens					
<400> 233 tttttctctt tgaaagttta	ttattttctt	taaaaaaaaa	aaaaaaccta	taccttttat	60
attttacatt cacctctcag					120
ccaccacctg cttgaaatgg					180
tctttggaca aattggtgta					240
aaaaattaat caggaggaaa					300
					360
gaagccaaac ccaaaaaact					420
tacagtcaac cccattctaa					479
gggtcttata cacaaataca	tgtagettga	tttgcagate	ageetetggg	accyaccet	473
<210> 234 <211> 388 <212> DNA <213> Homo sapiens					
<400> 234 ttttttttt tttttttg	catttcaaat	attttaatag	ttttatttcg	caaagagaag	60
cctaagaatt tttttaaaaa					120
tataatttgg gaggacaaat					180
aattagtaca aaaatgacag					240
taactatacc atcttgctgt					300
atatgctaaa tttagttctt	=				360
ttgtctccat cccattttcc	tctttaag				388
<210> 235 <211> 536 <212> DNA <213> Homo sapiens <400> 235					
ttacaggtat cttaacttta					60
ttcaaccaag catttgccat	aaagataagc	atcaactttc	ccattggaca	agtgatagtg	120
ttcaagctac ttgacttgtg	aaaaacaaaa	aaccaccatg	acttctcaac	aaatacattt	180
taaaatgaaa tatgctcagg	ctgataaaca	aacaagatat	taaaatggag	actgacattg	240
aactacatag tcaacttgaa	aaacacaaga	agacaatgct	cctataaaat	gatatattat	300
tggctttaca aagacatact	ggtttatgtt	tacaactatg	ttttatttc	aaatggtaaa	360
ggaaaggctt catgttgcta	tttgaaagta	cttctcaact	agccgggcat	ggtggcataa	420
ttcctgaagt aggaggatca					480
attgtgccct gaccatagct	tgggtgacag	agtgaactct	gtctcaaaaa	aaaaaa	536
<210> 236 <211> 378 <212> DNA <213> Homo sapiens					
<400> 236 gagagcacaa ctccaaatca	tcttttatta	atataaaaag	ggcatattta	gcaaaagaca	60
cacagataaa agagtcacta					120
cctgctgggg gagaaggagg					180
gtaggggcca caaaagttcc					240
gggacctcgc tgctaactct					300
cactccttgg ttcctggagg					360
tagtgcaact cgggatga					378
<210> 237 <211> 455 <212> DNA					

<213> Homo sapiens	
<pre>&lt;400&gt; 237 tttttactqt atcttatttg atgatattta ttttctctgc caagctgtat agtaaaagga</pre>	60
aaataagtca catctggtca ttggcatttg tatcgtcatt ctgtaaagac aaaagagtac	120
ctatataaga agctccacgt agtgcaaatc gacatctggt aggctgctcg cccccaggca	180
gcagctagag totgtaatto totgcgtoat cotottott ttottcattt ttgctttttc	240
ttcgcttgag ttcttctctg aaattatatg caaagagttg tgggtcttca tcacacattt	300
ttctqtatac atcacagagg ctcttaaagt gtgagatgga gagctggcgg ggccgaagag	360
taggqtctat qtctqccaac tctaacagcc tgcccgtgct ttccaagcgc tgcgcttcag	420
ggaataacat totgagcoot cgatggcagt attto	455
<210> 238 <211> 357 <212> DNA <213> Homo sapiens	
<400> 238 tttctttaac cgtgtggtct ttatttcagt gccagtgtta cagatacaac acaaatgttc	60
cagttagaag gaattcaaac ggaatgccaa ggtccaagcc aggctcaaga aataaaaagg	120
gaggtttgga gtaatagata agatgactcc aatactcact cttcctaagg gcaaaggtac	180
ttttgataca gagtctgatc tttgaaactg gtgaactcct cttccaccca ttaccatagt	240
tcaaacaggc aagttatggg cttaggagca ctttaaaaatt tgtggtggga atagggtcat	300
taataactat gaatatatct tttagaaggt gaccattttg cactttaaag ggaatca	357
<210> 239 <211> 378 <212> DNA <213> Homo sapiens	
<400> 239 aacataaaaa aataaattta ttttgagtct gaaatactga agaacaagca tacagataaa	60
tagtacaaag aacaaaaatt agaacatgag taatgactta agacacaggc atttttctag	120
ctattgcata cagacacatt tttacacaca aacatatttt ttaaagacat ctctccaaca	180
ttctcaaaag gcaagagctg tatttgtgac atttgtaata aatgcaacag cttttgaaac	240
atccagtttc tttcctaagt catttgatta aaattcacac aagtgatgat tacctattcc	300
attttctgaa aatacgacat acagtcatgt ttcgatcaac aattgaccac atatgacaga	360
gatcctataa gattataa	378
<210> 240 <211> 330 <212> DNA <213> Homo sapiens	
<400> 240 tttttttcaa ggattcacaa actatggcat tttatttcag agcctttgct tacatttgta	60
caatatatta cataattott cattgtttgc agatoctaat atatacttta tagottttat	120
tctataagct tttttcttca acattttgct gtcaacaaat ctttacagtc ctgtacaaat	180
ttgaataact tgaaaccatt ttcaacaaaa ttagttactg taagcacaca ctacaagact	240
gaaaatgctt ttcttagaaa agttgaatgt aaaggattct gacacgttag catctacaac	300
aaaacgcatt gaaattccca cgtcgtattg	330
<210> 241 <211> 459 <212> DNA <213> Homo sapiens	
<400> 241	
tttacacaag aaagtgctgc ttacattgtt gttttgtgtt atttagtgat ttgttcagcg	60
ctcatctctt ccaccagact gcgcttcctg aggacaggga ccttaaagca cctcacatag	120
ggtgcgcgtc tggtacactg tcgccgagta ccagacaacc agtgtctcac acgggggaag	180
acgatgaaga cagcaatggc atccttggga agatgggcag gagaccccat gacacctggc	240
acctgggcct aagctgggag gccagcggcg tccccaggag accacggccc aggctgggag	300

cttgaccggc cagacgcccg tgggtgggcc tgggcctccc gcctgggagc ctccagtgtg gcgcctggct ctgggtgggt aacaggagct acaggccagc aatgcccttc ctgtcctcgg	360 420
cctggctcaa ggactgggtg cagagggcat cagcgatgc	459
<210> 242 <211> 418 <212> DNA <213> Homo sapiens	
<400> 242 gaaatgtaag tatacagatt ttaatttatt tttaagaata attgtatatt ttaaaaacag	60
gacacgtact gtatgagtaa acagcgtggc taacaccaag tccacactgg taagcttttg	120
agaaccattt acactatgtt gacagtagta ctgctgcagg cagacagcgg aagaataaat	180
aatagtgctt caagaagagt agtgattgag aggataggta aagagggcgc ctcatcgtgg	240
aagctagagc aggaacacct ccccagtagt gacatgtgca aagttccaga tctccacgac	300
aaagacagct caacccactg gaacaaacag actcccaatg tggctggcaa ctgcgggggt	360
agaagaactc aggcaaagta ggcacaggaa tgggggagat gagagccaag ggacaaac	418
<210> 243 <211> 396 <212> DNA <213> Homo sapiens	
<400> 243 tttttttttt tttttttgg atcaccagca attctcttta atcctcttc ttttccttct	60
aaaagetttt geaaagteea atttattttt acagtaaata gattatettt taagaaaacg	120
cactagcaag attgtagcaa agtgtgttta tgcaaacagg tggtgcagag acagaggggc	180
ggaccttgtg ggcagctgga ggaccatccc agctcatggg ccacgcacag atgggagcac	240
ctcagtgttt tcagccaaga gaacacaagt ctcgggatcc atgtggctcc ctcaggccct	300
ggacccaggc aggcaggaca cccttgacca tggggcaggg gacatcccag catcttgtct	360
gtaccccac cacctgcgtg gcacctggtc ctcaga	396
<210> 244 <211> 286 <212> DNA <213> Homo sapiens	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244</pre>	60
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca</pre>	60 120
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg</pre>	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg gggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctccttt</pre>	120
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca</pre>	120 180
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat</pre>	120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat </pre> <pre>&lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggcttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat &lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA</pre>	120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggcttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat &lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 245</pre>	120 180 240 286
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggcttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat  &lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 245 ctccctagga aggatatccc aaagcaaggg catcttgaaa agcatgattt tctcggtaat</pre>	120 180 240 286
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggctttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctccttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat  &lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 245 ctccctagga aggatatccc aaagcaaggg catcttgaaa agcatgattt tctcggtaat gtttgccaac actgttcact ttccacatgg tcacgactga aaacacattt accaatacct</pre>	120 180 240 286
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggcttt attacaaaat gaattctaat aaaaccaggc ctggtcttca acccctcccg ctgggtagag gccctagggt gggctagggt aggggagatg ggggtggggg gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctcttt tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat  &lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 245 ctccctagga aggatatccc aaagcaaggg catcttgaaa agcatgattt tctcggtaat gtttgccaac actgttcact ttccacatgg tcacgactga aaacacattt accaatacct ttcaagcgat atgactacca gaaatagatc ttctttacta ccctctctga aatgagtaaa</pre>	120 180 240 286 60 120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 244 caccactaaa aaaggetttt attacaaaat gaattetaat aaaaccagge ctggtettea accceteceg ctgggtagag geectagggt gggetagggt aggggagatg ggggtggggg gccetgaaag aacagagcag getgeectee teteateagt eteagetget geecteettt tataaaggge tagaagaget ettecaaage eecttgagag agteeceate ettecaacca ggateettee aaccactget gteacaggae ettageaatg eegeat </pre> <pre>&lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre> <pre>&lt;400&gt; 245 cteectagga aggatateee aaagcaaggg catettgaaa agcatgattt teteggtaat gtttgeeaac actgtteact tteeacatgg teacgactga aaacacattt accaatacet tteaagegat atgactacca gaaatagate ttettaeta eectetetga aatgagtaaa caagaaataa atteagaagg taggettttg aaagaaaaag aaaaaaaatt gettgegget</pre>	120 180 240 286 60 120 180 240
<pre> &lt;212 &gt; DNA</pre>	120 180 240 286 60 120 180 240 300
<pre>&lt;212 &gt; DNA &lt;213 &gt; Homo sapiens &lt;400 &gt; 244 caccactaaa aaaggettt attacaaaat gaattetaat aaaaccagge etggtettea accecteceg etgggtagag geectagggt gggetagggt aggggagatg ggggtggggg geectgaaag aacagageag getgeectee teteateagt etcagetget geecteettt tataaaggge tagaagaget ettecaaage ecettgagag agteeceate ettecaacca ggateettee aaccactget gteacaggae ettageaatg eegeat &lt;210 &gt; 245 &lt;211 &gt; 307 &lt;212 &gt; DNA &lt;213 &gt; Homo sapiens &lt;4400 &gt; 245 etcectagga aggatateee aaagcaaggg eatettgaaa agcatgattt teteggtaat gtttgecaac actgtteact tteeacatgg teacgactga aaacacattt accaatacet tteaagegat atgaetacca gaaatagate ttetttaeta ecetetetga aatgagtaaa caagaaataa atteagaagg taggettttg aaagaaaaag aaaaaaaatt gettgegget teacagtgaa aaaaaattgga gtgtttgtge eggttaagat tttaatggtt tettaateaa aattete &lt;210 &gt; 246 &lt;211 &gt; 429 &lt;212 &gt; DNA &lt;213 &gt; Homo sapiens &lt;400 &gt; 246 &lt;211 &gt; 429 &lt;212 &gt; DNA &lt;213 &gt; Homo sapiens &lt;400 &gt; 246 </pre>	120 180 240 286 60 120 180 240 300 307
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 244 caccactaaa aaaggettt attacaaaat gaattetaat aaaaccagge ctggtettea accceteceg ctgggtagag geectagggt gggetagggt aggggagatg ggggtggggg geectgaaag aacagagcag getgeectee teteateagt eteagetget geecteettt tataaaggge tagaagaget ettecaaage eecttgagag agteeceate ettecaacca ggateettee aaccaetget gteacaggae ettageaatg eegeat </pre> <pre>&lt;210&gt; 245 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre> <pre>&lt;400&gt; 245 cteectagga aggatateee aaagcaaggg eatettgaaa agcatgatt teteggtaat gtttgeeaac aetgtteaet tteeacatgg teacgaetga aaacacatt accaatacet tteaagegat atgaetacca gaaatagate ttetttaeta eectetetga aatgagtaaa caagaaataa atteagaagg taggetttg aaagaaaaag aaaaaaaatt gettgegget teacagtgaa aaaaattgga gtgtttgtge eggttaagat tttaatggt tettaateaa aattete </pre> <pre>&lt;210&gt; 246 &lt;211&gt; 429 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 286 60 120 180 240 300 307

gggggcagca agaccaagaa gaccacagcc aggccctggg ttcagcttca gagccatcac ccgctgcctc ccccaacccc caatctcctg agggaggaga attcctaggg acaagaccca gacccctttc cttcagcctc tgcttcacca agggggcctg gcctgcgccc gagctcctcc tggcctgccc ctcagggatc ccaggtcctc acctctgctc ttcaggcagg aaaaggggag gagaggagag	180 240 300 360 420 429
<210> 247 <211> 375 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 247 tctcaggacc caatagattt tatttcaggt ggggataagg gacaagcaat gtgaagacag</pre>	60
ggaaggaaag aaggaagtet etatgttetg aaggaetgee taccecactg ttgagagtge	120
cacattetge cettttagea attttaatta atttttacta ggaetttggt aacaccacag	180
aaaccctgtg gcttcctgtt aaaatgactg tgttacatgc cttattttta ttaaagtgga	240
atttaacaaa tacttttatt attttgaagc atttcatcaa ttctcggtgg aagcactaca	300
tcatcgaatg ggaaataaca aatgaaaaat gaaaaaaaag attatccatt cacagtaagc	360
accattttac tagaa	375
<210> 248 <211> 304 <212> DNA <213> Homo sapiens	
<400> 248 tttttcttct gtataaaagt atattttatt taaaaacagt gatattgaca tgtatgttat	60
agcccttaca gaaaaataac acgttttata gtccttttat ttgaaattca gtgtaaatca	120
ctcttaaact ataaattcac agttgttgga ggtttttttt tactttaaat gatgtgaaag	180
catttgttcc attcaaaggc ccctatgcct ttgaatgaca tattctcagt aacttcttgg	240
ccagtaacta gagtatgtga gactgagtaa ctagaatgtg catatttcat gaattagctt	300
cccg	304
<210> 249 <211> 387 <212> DNA <213> Homo sapiens	
<400> 249 tttgaaggga gcagagggca ggcacgcgag ccacggccac gctttattgc ttaagacgca	60
cacagaacac agaggaacaa acaaggagga aagggcgcca cacacagccc agaccaggca	
ggagcggccc agccgcggaa gagacgttcc ttgcaaggca gggccctgct ggatagcacg	180
ccccctggga cgagggtcag ggaccccagg actgcacagc tgcagacttg ctgggaacct	240
ggtacaggtg atacgcccac tctcgcctgt tgtcagagct tctacctctg catccagcca	300
tgcacccacc atttccccac agggtacagg ggcagccttc cttgatccac agccaaccct	360
tctcctgctg tctctggctg tcagtga	387
<210> 250 <211> 324 <212> DNA <213> Homo sapiens <400> 250	
ttgtcaatgt tagaaacatt tacttctgac gataatccat atagctttct ctgatgttac	
acagegatta cateteettg tgtetaaatt aaagteaaag tatgaatttt aagatgattt	120
ttaattattt aacaagtaga aatacgatca gtgacaatta tcaattaaaa cattaaacaa	180
cccagttacc ttttcttaac agtcatgatg aaatatccct ttcctgtctt atcagaagcc	240
ttaattattc tctaccacac acaccacaaa agcttcttaa tagagcatca gtgtccatca	300
cacctttgtg tagaatctct ggca	324
<210> 251 <211> 434	

<212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 251 tttgttaaag aatgctttat taatacaaat acacacaaac tctgaagcac taagaaattt</pre>	60
aaatatctat gtcacagcaa acaggtggca attcaacatc cagggtcgac agaatgcttg	120
aaggagactg caacagattg gattcccatg gtggagaggg catcttcaca ggtgaagggg	180
ggcccagctg aaacagcttt tcaagctctc tctcctcgtc aaggatcatg agaggcactc	240
cactcaaggg gaggtgcgca atctggtgct cttcaggcag gtcaaaactc tcaaagtcta	300
gaggattgaa gggaaagaat ttttctattt ctggataggc atcatctgag gcaggaacag	360
agettettge tetaacagte teeteagtea tettettge agaaaagett ggetgttttt	420
gtttgagggg teee	434
<210> 252 <211> 337 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 252 ttttaaaaat gtaatactgt ttatttaact tcaaaaacat ttcagcattc taaacataca</pre>	60
aaaaaataac agaacgttgc gaatcgtgtt taagtacagg aggttcttga actttcattg	120
atgcagtgac tetttgettt getgacaatg aagagtteta tagtttgttt aaaaacaaac	180
agtttaaaaa ctaccgcact taaaaaaaaa aaatattctc atgccagctg acccccttt	240
gtccacagct aagatggcag cagaatgcta tgtcactata tacagaaaca agacaacctg	300
aagctaaatg gatgccccct gcagagtcaa caggtcc	337
<210> 253 <211> 443	
<pre>&lt;211&gt; 443 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<400> 253 tttaggtaaa agatttttat tcttatttaa ccatgctgca tgtatacata caataccaat	60
atatacaact tgaacaaata caatttatac ataaaataca atgaaagcat ggcttttgaa	120
actgatgcaa caaactgtaa tttgtaattt tggccagcat acagtattat agtaatgcta	180
ctgaagttat tcattaaatt agtcagacta cagtataagt tcaaaggcac tagaaacatc	240
tatgttttct tctagtattt ttaagaacaa aaaataattt aaaataaaac aaatgtatac	300
attaggaaat tgggcagaca ttggtgtact taaatgtaaa cgctacccat tccttaattc	360
acagccctgt aggaaagaag actttcctta agagttaagg ggaaggatat taaaaacaga	420
ctaaaaggaa acaaacaaaa cag	443
<21.0× 25.4	
<210> 254 <211> 463 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 254 gagttctcat tagactgggt tctaggcggg ctgctccagc tccataagga agcactcgat	60
gtcgtcatag aggctgttgg cgctggacag gcagaggctg aggctgctgc tatccaggga	120
agacacaccc tcacgctgcg tgccctctag gtgcactcgg cacagccagg gttccagctt	180
caccaggacc aggetettet cettgggeet eccagetgac aggteetgee egaageceag	240
gtagatggta tagcgtgggg agccacggcg ctgccgtccc ggaattccac cagctctcgg	300
aagaagactc tgaagtcgaa gatgggggtg tcacagttcc gaggcagcag gcaggctggg	360
gtggagggc tggcggacta ggggggccgc ccacctcca gtacaccttg cacttgcca	420
tgcgccgggg gcatagttgt ggccctcaa gctccaggtg caa	463
<210> 255 <211> 404	
<212> DNA <213> Homo sapiens	
<400> 255 titgtttctt tgaattttat ctttatttct ccataagggc aatcagagaa atatgctttc	60
ctttttaaca agctcatctt taatgtggta gcaaagatgg aaggtgcgag accaaatctt	120

accaaactag ctatttttac aggccaataa agcaacatgc aatccccctc aacaaattta	180
aataatcagg caatactaag aatgtatatt ccattaaact aaaataaaca aggttgaaat	240
gtggtacaga attcactgat gagcctgtga actccacgtg aggatgtcca gtgccttatt	300
tatctcagta accagagtac ccagcacaca agataaaagt gggtattacc taagtggcca	360
ctattttatt aataatgcac ataacatatg cttatcatta actc	404
<210> 256 <211> 416 <212> DNA <213> Homo sapiens	
<400> 256 ttttttttt tgttagaatg aaaaatttta tcatcactcc tgttcacccc gcagagtctg	60
cggagtgcta aagggcacac caataaggat ccgagggagg gggtctacat ctgctttttc	120
agcccccaaa gccatatatt ggggtggccc aatataaagc tactcattag tttggttcct	180
gagcagacct gctaataaac ctcaaaaaca caaaagtcta cttcactagc cagaaatgaa	240
agcaggatct agatctgagt gggaagggca gagggcagca tgggttgact ctagttggaa	300
ttgtgccagt cttctctgga ggccgactca ctcgtggagt ggggaaaggg gtggccaggc	360
cccagtctag aaaccccagg cctatgggaa gtgatgccag gggaagggaa	416
<210> 257 <211> 193 <212> DNA <213> Homo sapiens	
<400> 257 ttttttttt tttttttt tttttaggaa cataaacttt tattgtcatc cagcacctgt	60
gatagtttca tgtctctcta aaggagacag gaaattggag cattgtgggc ccttttaaaa	120
gaaaagagga gtaggtaggc acacccaggt gcttctaaaa caaccaagcc caaacctgac	180
atgetectee eca	193
acycoccoc coa	
<210> 258 <211> 338 <212> DNA <213> Homo sapiens	
<400> 258 qaaaaatcaa aaattttaat cttatcatct ttacataca	60
attgtctttg aaaaggtccc ccctcccccg ccaaaatctg tagaccataa gtcttggcct	120
acactgacct ggtttgtaaa atatcttcct ctgtgtactt ttcccttcag cctcaggctc	180
ttggctgatt cgctcacaac agaagcagct tggctttcct ctggaagtac caatttgaaa	240
gcccaccagc ccgcaaacct agagtgtatt ctccaccct gggtcacaga acttcgttct	300
	338
ccccggctct gtaacccaag gaccctacag cctctgag	330
<210> 259 <211> 224 <212> DNA <213> Homo sapiens	
<400> 259 ttttttttt aagccttata tttttaataa aaaataaaca gtctctgaca agcagttttc	60
tgaatcccaa aacaaaggaa atttgagggg gagaggtgaa ggggtcagct agggtaaagg	120
agtgaagaag gctcagatta cccctgccat tctgccaggg cagaagggat cagagtctgc	180
cccaactgaa gcaagaagaa aggtggtcag acttcaggaa agac	224
<210> 260 <211> 545 <212> DNA <213> Homo sapiens	
<400> 260 ttttttttt tttttttt tttttttt tttttttt tttaataa	60
atttggcacc cgatggcaat acaaaatcct ggcagtggga gtggaaaggt tctctctct	120
aaatacttcc atactatgtc gacccaaagg caggacttgg cagcaaggct cacaaaccac	180
addedeede dedeedee gaeeeddag edgaeeegg edgeddggee ededdaeedd	
ccaaacaaat atttattgag caccttgact actacaggcc tagcattttg ctagggacca	240

```
300
tgggagatgt gaaggaagtt atctcacaca tgatatgtct tcaaggagct aaaaatgcca
gtggataaaa gcaaaacaca tggaaaaaca aagtacaaat aataatccgt gtatattgtc
                                                                    360
aaaaqqaaca ttttatcaaa aggtaggatt gtagctaagg ttggcttgcc ttcttccctc
                                                                    420
ttttattcaa caaacattta atgaaggccc actatgtgcc aagcacttgg tacatgatgg
                                                                    480
tqaataaaac aaacaaggtt tctgccctca tttacagcct ggtaggggag acagaaatga
                                                                    540
                                                                    545
acaaq
      261
407
DNA
Homo sapiens
60
gccagtcaag agctgtgggg aggttgacag aattggggtg caggtacatg taggatacac
                                                                    120
aqaaqctttq tgtctgtgga ggctgtatga gtctgtgggt gagcagcatg tctaagtggg
                                                                    180
tggaaacatg tatagctaaa ggcaggaact cttcccatac agctaaaccc ttgttcaagc
                                                                    240
                                                                    300
aatttaaata aacaagaaca ttttaaaaaaa ttaaaacccc actaaaacaa tccttgtgga
gcagttttct tgagtgctta agtagagacc agattcaaaa aaggattaag agaatgtcgc
                                                                    360
                                                                    407
ataaccaagc tgcagaaact gaaaccgagc ggggtgtgag gggagat
       262
408
DNA
Homo sapiens
60
caaaaccaca actcaqtctg ctttggtatt gacaaaatcc ctacaactga gatattaaag
                                                                    120
agatacattt attttagagt tacataaaac cagaatccaa cactacccta ctttcctatt
                                                                    180
cctttqtqqc tctqaatgca gctttaaaaa aacaaaacaa agcaaagcaa agcaaaacaa
                                                                    240
aacaqctctt tataatgtac aatggcttaa gcaaatcgct ttagtttttt ttctatttaa
                                                                    300
gatttaggac agactactcg tctaaaattc actatttaca gagaaggtcc tagggaacag
                                                                    360
gataacttat ttaggtttag ctctcataat acaatatcca taatggct
                                                                    408
       263
308
DNA
Homo sapiens
<400> 263
ttttttttt tttttttt tttttttt tttttttt ttacatccca aacaggtctt
                                                                     60
tttatttaac ataaqqccaa aqaaqctatc aggcgttgct gaatactgtc cactaactgt
                                                                    120
acaaaatatt gactgcatgc ctcgcaaaca ccaaaatatc cgctggaatg ccatagaaat
                                                                    180
aaataacttc tqctataaac acatgaaaac atatcaaact gttatctctt taaacatatt
                                                                    240
                                                                    300
gtaaataaaa aaattaccag tacttctaca caataaatat taagaaacca ttgacatagt
                                                                    308
tgaaatgc
       264
702
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 264 ttttttttt aaaaagttga gtattttat tgggtcttca aatctgggtc ccacagtcct
                                                                     60
catttgatgt cactcttagc tctgtactga tctctcctct gacttttacg gagggcttgc
                                                                    120
anaagtagcc tattgcagcc aaagtttcac tccaaagcta cctctctaag gtctaaggtt
                                                                    180
                                                                    240
actatqqtaa aqttttatac aacagttttc cttaaaaaata ttccacgatt tgttactccc
aaacaaaata agattatgca ccacteggag aaattagtca ttetgaagat gtetaagaac
                                                                    300
```

```
360
tatatcactg ccaaagaaca tttctcagtt catattcttt ccttcaattt tcatttgcac
atccacactg tggggttcac aagtcatctg ttttccatga tcttatggtc aagtcaagag
                                                                      420
qacttagact tatacatcat tttccaacag ctgggatgcg attcacagtt tggtgcatac
                                                                      480
ccatatgtat gaaaataaga acctcactcg gtttaatcga taattcacat cgagtctcag
                                                                      540
                                                                      600
attggcttgg gcagtcttca gtactcctca catgagatac tgntacaggt gtcaggttca
                                                                      660
ggtcatcgga ttgagtacca gggctatcgg accagagcgt cagtgaagta accacatctt
                                                                      702
qctcacttcg acttgcagta accatagcga cgggactgtg tt
      DNA
Homo sapiens
60
atttqattaq ttgaaaacac ttccgactaa ggaagcagag agcccacaat cctgtgggaa
                                                                      120
aacaggcctg ggaactaata tctcaggggt agtgagggtc gggcccagat cctcaaaggt
                                                                      180
tecetqeece tqaaattqea cetttgacag etgetgaatt ecaageacag egttaagtge
                                                                      240
tttacatggg gtaaccctaa aaaacacact gggcctcaga cactcccgta cacacaccca
                                                                      300
                                                                      360
acctctaccc tgtggatgtc ctagataagg gttttctctt cacaaaggta aatcaactct
ttgcctcctt agggagggaa ggaataaagg cattattttt gagacttttc t
                                                                      411
       266
441
DNA
Homo sapiens
<400> 266
qqttcaacaq atacacactg attatctaac ttatcatcaa ttggaaggtc tagttcctca
                                                                       60
                                                                      120
ttaaacatgc ttttcttatc tcccatgtca agttctggat ctgtatatgc aatgatatca
aactctcctg accttaagag gtcatccagg ttgggatcat tagtttccaa attatctaaa
                                                                      180
gtatccaatt caactacctt gccatcctct gtatctaaat ttaagttttc aagatcttca
                                                                      240
                                                                      300
tcatctaagt ctttgacttc aacccctca aggtctttaa catccagttc cttcacagaa
gggtcatcag aatcaagttt ttcctctaga ccatcagaag gctgggtggt tatctgtaaa
                                                                      360
ttatcagacg ttgtttcaga cggtacagat gttgacaaag gagcttctga aaattcacca
                                                                      420
cctagtggat ggttcagagt c
                                                                      441
       267
474
DNA
Homo sapiens
<400> 267
ttttttttt gatctgcaaa attttattaa gcaatagctg gacaactgtt acaacttcaa
                                                                       60
                                                                      120
atcatcaaga aaaaaataag gagattaatc cgtctcagta ataaagacag aaaataactt
ggacaaacca catcgttttg aatgcaaacc attaatgcct tctagaatat ctcctgcaca
                                                                      180
                                                                      240
atctaataca caaaatacgt aagaagaaag gcaaataagg atgagctcat taaaacgcat
                                                                      300
ttgggagtcg caacagatct tgcttggaaa gtaaaaccag caggatgctg aattaaaaaa
caaacaaacc aacactggag gaactgaggt gcacaagcag tgcacgccac tgccgaggtc
                                                                      360
                                                                      420
tggacatgaa catgctggtg gtctagtttg gtctggggcc tatgcacctg catcgtgcac
                                                                      474
ttacggttaa aaaaaaaaa aagggaaaaa gaaaatgcca gtagtaataa actc
       268
365
DNA
Homo sapiens
<400> 268 ttacttttag aattttattg acttttttct tcataacttt aaaacaaaaa cagcgcatga
                                                                       60
aaaccagtgt cttattccaa agtctcaact cagctgattg ccaggtgaac atcaccatct
                                                                      120
tactcctctg aataactaga cacaaattac atagcaagtt cgtgtttctg cccacccaag
                                                                      180
```

<210> 273

acacagccag taatcagtca gcccatcttc tctcagcagt ctcaaggtgg gtcaaggctg ccact	tcctcccatc	tgctaagatg	cgccttcctg	gtggctctct	240 300 360 365
<210> 269 <211> 273 <212> DNA <213> Homo sapiens					
<400> 269 tagctttgca caaatatttt	aaagacaaat	tcagctagtc	taagaacttc	atgaaaataa	60
aacaggtgga taaatacttc					120
aggaggtatg ttgatccttg					180
ttggatgggc tctttgtggc	tctgccacgc	agctggtaga	tctccttgga	ggccttcttc	240
agcatcttct cagccgcctg	ctcatgacgg	tag			273
<210> 270 <211> 383 <212> DNA <213> Homo sapiens					
<400> 270 tttgaacata aaaattcttt	atttaaccta	atccagccag	tattgagata	gtttgctata	60
ttaaaaacaa gacgtttaaa					120
cactaagttt aattttatat					180
ttttcagcca ctttggagat	aagttaactt	ttgaaaagaa	tagaattcta	gtagtcgtca	240
ttgaatttta taaaagaggt	ttaaaacatt	aaagtttcca	gaaataacac	agtaaagaaa	300
tatgaaaata aactggaaaa	taaaatatac	ccacccatcc	gaaaaatcta	catcatctct	360
ttcatttgtc cccaatgcct	ttc				383
<210> 271 <211> 436 <212> DNA <213> Homo sapiens					
<400> 271 tgcagacttt ctttacccgt	gcagaccata	tggaaaactg	gccattagtg	atgtatttt	60
ctcccgggc tcctgagcca					120
tcatcagttg taaaactctc					180
gtaagtacag aaagaaggtt	ttaaatgcac	atagacacac	actcttcaac	tgccatacga	240
agcgtctgct tccccagtca	tttcaggaac	catcagatta	ttcacqqctq	ggaggccctg	300
gagtcttaca aatctgagca			33 3	33-333	
tgaggcagaa gaattgcttg	tggtggtggg				360
		cacctgtaat	cccaacttac	tccaggaggc	360 420
actgcactcc agccta		cacctgtaat	cccaacttac	tccaggaggc	
<210> 272 <211> 355 <212> DNA <213> Homo sapiens		cacctgtaat	cccaacttac	tccaggaggc	420
		cacctgtaat	cccaacttac	tccaggaggc	420
<210> 272 <211> 355 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	aaaccgaaag	cacctgtaat gcagaggttg	cccaacttac cggtgagcca	tccaggaggc agatcgcacc	420
<210> 272 <211> 355 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 272 acaattctcc gcagatttta	aaaccgaaag ttaattataa	cacctgtaat gcagaggttg	cccaacttac cggtgagcca cagacgtcct	tccaggaggc agatcgcacc	420 436
<210> 272 <211> 355 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	aaaccgaaag ttaattataa aaggtagtcc	cacctgtaat gcagaggttg ctttttttt atggcaagta	cccaacttac cggtgagcca cagacgtcct atgaattccc	tccaggaggc agatcgcacc gccatcttct agtaactagg	420 436
<210> 272 <211> 355 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 272 acaattctcc gcagatttta cattcagact tttcttagca	aaaccgaaag ttaattataa aaggtagtcc tgtttttatg	cacctgtaat gcagaggttg ctttttttt atggcaagta tttataaact	cccaacttac cggtgagcca cagacgtcct atgaattccc caaaaagtaa	tccaggaggc agatcgcacc gccatcttct agtaactagg catgaagtgc	420 436 60 120
<210> 272 <211> 355 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 272 acaattctcc gcagattta cattcagact tttcttagca tctgtaacag aagtaaattc	ttaattataa aaggtagtcc tgtttttatg cctcggtaac	cacctgtaat gcagaggttg ctttttttt atggcaagta tttataaact cttcttttga	cccaacttac cggtgagcca cagacgtcct atgaattccc caaaaagtaa tgaaccagtg	tccaggaggc agatcgcacc gccatcttct agtaactagg catgaagtgc tgcagcaaac	420 436 60 120 180
<210> 272 <211> 355 <212> DNA <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 272 acaattctcc gcagattta cattcagact tttcttagca tctgtaacag aagtaaattc aaacaccttt agttcctcc	ttaattataa aaggtagtcc tgttttatg cctcggtaac gtgggatcca	cacctgtaat gcagaggttg  ctttttttt atggcaagta tttataaact cttcttttga cacaggtcat	cccaacttac cggtgagcca cagacgtcct atgaattccc caaaaagtaa tgaaccagtg tttcaggcaa	tccaggaggc agatcgcacc gccatcttct agtaactagg catgaagtgc tgcagcaaac gatgagactt	420 436 60 120 180 240

<211> 256 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 273 tctgatanct atgtgaaaat tcttttcaaa gtaggtaaaa gccatcacta tatttcaaag aggtcacagt gacatcatat acaaaaggaa ccagattgaa aaagatattg ctgacatagc cagtagtgag attactaaag antaaacaga aatgccttgg gaaattattt ttacaccggc ttgaattgaa acattaaagc aaaatgaaag ctgtaaggng ttcactagtt ttcccaaatg cgttgtcaag tttatt</pre>	60 120 180 240 256
<pre>&lt;210&gt; 274 &lt;211&gt; 433 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<pre>&lt;400&gt; 274 tttttaaaa actttatt tagattcagg attacatgag cagatttgtt gtgaattcta tttcaattaa catttagatt aggtatcatt tgaaaactgt tagtatttta ccaacattct gcatttcttt cttaagatac aaagtctgta ggagtctaat tcctgataga aaaaaaaaat gtgggaatga tactaccacc tcccatcaat tcatgttctt ctacttatac tgttcaaata tgggaatgtc cctattctcc tctgtccctt tcaaaccaat tcaacctaaa ccaaatgttt aaggtgccct taaaagggca aggaccatta tacctatttc aggctgggg gnccaattna aaattggga aagggatcct tagggntttt ttcccctatg gcctttcccn ggaacccgga gggggggat tat</pre>	60 120 180 240 300 360 420 433
<pre>&lt;210&gt; 275 &lt;211&gt; 345 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 275 ttttttttcc taaggeteta etteaaagtg etggetatte aaceaactaa tetgaatagg tatttggatg gtgaggtaaa agetatttta aggtetgtte teateteact ttaataaggt gaaaaaaatt geeatatgta etaaaaatag tteaetgtte tgaaacteaa tgeetgtttg ecaaaacaat attaatgatg eatattetat geattttte eecaaatatg ggeatetgee gtgeacaaaa tteaggaatg ggaaaceaeg agatatttga aataacacea teetetttae atgggttaaa aaagteaaat ggaateeagt taettttaat taaaa</pre>	60 120 180 240 300 345
<pre>&lt;210&gt; 276 &lt;211&gt; 331 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 276 tttttttttg atggtggtg tctctaatat ttatttgtct ggttataaaa ttaatatgtg aggagcattg gatttggtga gaacgttttg aaccctagct gtcacgtgcc acctgcggga tctagaccag tgacttctca gaactgccat ttcctcatct ggtagacagg atggtaagcc ctgtcttgct cactccacgt atgggcagtg cagatgaaat gagatcacag aggggaagca attggcaggc tggaaagtgc tgacaaatgg aaggggttgt gtcaccaccc tcagctgagg tagtaccaag gtccaagctc ctgcccctcc c</pre> <pre>&lt;210&gt; 277 &lt;211&gt; 274 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre> <pre>&lt;220&gt; misc feature &lt;221&gt; mea,t,g or c</pre>	60 120 180 240 300 331

<pre>&lt;400&gt; 277 nanaactgat agcctagcaa tacccaaatt agaatttgtt ggctatcaat aaataatatt ttataagcaa cagaaacatt taaaaacttg gaagaattgt gataggctag ctaaaataca acctacaaaa taatttttgt aaggccaggn acagtggctc atgcctacaa taccagcact ttggnaaggc cgaggcaggt tgtattgctt gagcccaggg agttcaagac ctgcctgggg caacaaagtg aggaccccgt ctctccaaaa aaaa</pre> <210> 278	60 120 180 240 274
<pre>&lt;210&gt; 278 &lt;211&gt; 417 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<223> n=a,t,g or c	
<400> 278 gtaaacactt tgctttggtt ctgtgtctat actggcatct caggagagtg agatatccag	60
acctgatctt cagaagcact atgagccagt atccatcggc gccactgatg agttccagag	120
tgaggacagt gctcacagct agaactgacc gtccccacac ttcatctccc tccagggntc	180
tcctgctgac accaggggct cctcaaaatt actccttcct tcacacatgg gtgacaaggg	240
ttctcaaaaa gaacacctgg gcagagatgc ccactacagg caatgcttgt gggtgggcaa	300
gaagcataaa agaaccccaa tgtnccaaca ccaggggaat gggattaang ccagggggtt	360
acccatttgt aaacaaaaac aacttccaaa acccaaccgg ttaaacnggg ggaggtt	417
<210> 279 <211> 227 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 279 taaaaatttt tttccactac ttttaattgt cagccttttt ttttttttta aacaattctc	60
tgtgccatgt atttaatctt cacatcattt ccaatactgg agatataaat tgcatagaga	120
ctgttagaga gttctaattt gttttatgca tgttttgcaa atttgactcc atgaaagggc	180
attngaatgc tgacttngtg tgcaagcatt gnccatgnac ataaaaa	227
<210> 280 <211> 454 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 280 agaactttgg agtaaaaatn gtctctgttt ccaagacgtg tgagatgtct gaactctgag	60
atggtgtttc atctccaccc gatttcacca aaggggtgtc aatatcttta aagaactgat	120
cttcagtagg aattggtgag gtggcaaggt aagcaggaag cttttcatat tcttcttcag	180
tctcctcaac aaagaaagct tctccgttat cacccaactt catgtgaaga tccactgcac	240
tgccgttgat ttctatatca atcactttct ctttgggatc tcagggactc ccagctttcc	300
caaacccgaa cgtggaaaag ggtgaacact ggatagcctg cccatcctgc tgctgtaccc	360
acggatggac atcaaatgca cccagagagg ggtggcctgg ggttaatgcc cttgtaggag	420
ttccttcaca gtgacaatca ccttgcccag ccan	454
<210> 281 <211> 112 <212> DNA <213> Homo sapiens	
<400> 281 ttaagaaata agaaatacat atatattgaa aaagtgataa atgtaggtat cctgagattc	60

tcaactataa aaagaacagt	aatagcaatt	tgaataatac	acataaaatc	ct	112
<210> 282 <211> 444 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 282 tgaacaataa tatctttaat	ataactgttt	ttgtgtgcat	agaaatcata	taagtaaata	60
aaaaaaaca acaacatgag	attacatagg	tggttataat	acaaaagtga	gaaaaaagct	120
agtgtctgag tattgcatcc	tggatataat	tccctgatat	atggtaaagc	ataaaagaga	180
cctatttctt caggagagta	gctgacccac	ctcagggcca	tgactgctct	tctctttccc	240
cacageetta gtaetttttg	ccaaaaggcc	cagatttgag	taaaggggaa	cgccgtgagc	300
gtaaggatcc gggcataagg	gctgcagtct	gttgagcttt	ggcaggttgg	tgttcgggga	360
agtaaatttc ngaaggaatg	ggttcctncc	ctgntgggtt	gttggtttgg	ttgctgattt	420
tccnggttgg gtaccaaggc	gcta				444
<210> 283 <211> 193 <212> DNA <213> Homo sapiens					
<400> 283 tgttctactt ttaaagatat	ttaatgatgt	ttttcaaatc	agtacaaaaa	tttaaataca	60
aaaatgattt gctattgaca	-				120
ctgttcaccg ttcattgtat					180
cttttcccct gtg					193
<210> 284 <211> 217 <212> DNA <213> Homo sapiens					
<400> 284 taattttcat agatcaattt	atttagaatt	acaaatatta	agaatagaag	atttatgcat	60
ttcttaatta acataacagt	ttagctaaat	ataaactctg	cactaaagtt	ctgcagtggc	120
acaataccaa caaagaatac	ggaagccttt	ttaaactata	caaaaatttc	aaatggaaaa	180
taatcttgtt tcagttttat	tatacattaa	catataa			217
<210> 285 <211> 176 <212> DNA <213> Homo sapiens <400> 285					
gtgatttgcc aatgcataac	agggtttcaa	gtttcattaa	tgaagggact	caatcgccta	60
gaacactaat ttcccttcca				-	120
ctcttggacc gtggaattca	catttcatat	tcttgatatc	aaacaccagt	gaaagc	176
<210> 286 <211> 474 <212> DNA <213> Homo sapiens					
<400> 286 gcttaacctt tttttctttt	ctgcgttttt	tatggtggcc	agagtgtctt	gctgtactaa	60
ggtctgaata atatccatta	taggaccatg	atctggatct	ctgagacaag	cttctttcat	120
cccatcggct tgaacagggg	tcacttaact	tatctccttt	actccatttt	tctccactag	180
gtggtctata tgctcttaat					240
tgtcatcatc atctgactca	gaacaggatc	ttgatcttgg	aggtgtgtga	tagcgaattg	300
tgccccttcc tttaatcttc	cgtccagact	ttgatacaga	tggtttctga	tcacttacaa	360
tgggtgcaac atcaggaatc	ttcggttcag	gttctgcagt	aacaacaggc	atatctcttc	420

tcagtaaaaa tcggttctca ggcactggag gaatctcttc tgggcgggac	acag	474
<210> 287 <211> 481		
<212> DNA <213> Homo sapiens		
<400> 287 gtcatgcaaa ttgattttat ttgtgaaaag attaagaagc cacagtaaat	gaaaggaaac	60
ggttatttaa actgctccct tgatagtcat aattatccag ttgaggtgtt	tctttgagag	120
aagaatatag acaccaggcc cacgagggtc tccgcattta ttttcaaggc	caaaggaagt	180
gacccctcgg aaaacaccct cgcacaacaa agggcttcca gaatctccat	tgcacgagtc	240
tcttccacct cggaggcttc cagcacaaac catattcatt ccaatcacag	ggttaaaatt	300
atagtgattt cgatcattgc agacttttct gtctatgatg gtgatattga	cttctctcag	360
agtatcggac caagatgcac tattgtgagt cctgccccac cctgcaactt	ggcacatggt	420
tcctggtttc acatcatccc ctttttaggt agatgaagga tagtcacata	tttgttaatt	480
t		481
<210> 288 <211> 412		
<212> DNA <213> Homo sapiens		
<400> 288 ttaaatgtat aaccttaaat atttatttga gaaaacaaat aaagatccaa	atacqtqaqt	60
tgatcatctg ataaaagtaa gagttgacaa aaaaggtaca tcttctccaa		120
gaaagtggga aagatcaagg tatcactaga ggtcaatgaa acaaaacata		180
tgacaaaagc caatctctga atctttgaaa agaatataat aaatgaacat		240
tgatcgagaa atgttttaga taaggcacaa aaagatacca agaatgttaa		300
tacatcctaa aacagtcaga tgagctcact gttataattc tggttcaccg		360
agcacaaaga aaggactcaa caaacatttg gatccatgaa taaaattatc		412
<210> 289		
<210> 289 <211> 502 <212> DNA		
<212> DNA <213> Homo sapiens		
<212> DNA	actgaaaagt	60
<212> DNA <213> Homo sapiens <400> 289		60 120
<212> DNA <213> Homo sapiens <400> 289 tttttctttt taageccagg etttatteea geetettttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag caatgetgat gatgaggtge tggggteeee gaggaeagga	gctcctaccc ggcctccagg	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageceagg etttatteea geetettttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag eaatgetgat gatgaggtge tggggteeee gaggaeagga aaggaacegg eeteagteea egeegteeag ggaetgtgge tetgeetete</pre>	gctcctaccc ggcctccagg gagctgtagc	120
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 289 tttttctttt taagcccagg ctttattcca gcctcttttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc	120 180 240 300
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctcttttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg	120 180 240 300 360
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageceagg etttatteea geetetttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag eaatgetgat gatgaggtge tggggteeee gaggaeagga aaggaacegg eeteagteea egeegteeag ggaetgtgge tetgeetete acetgatttt etatgeaceg aaactgeeaa ggeeagettg tgttgtaeag agateaaace tgttgteete agggetgtag tteteggegt ggtaeegggt teatettgtg tetgtteatg gagtaettgg agaaaaaceg etteaetttg</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct	120 180 240 300 360 420
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct	120 180 240 300 360 420 480
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageceagg etttatteea geetetttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag eaatgetgat gatgaggtge tggggteeee gaggaeagga aaggaacegg eeteagteea egeegteeag ggaetgtgge tetgeetete acetgatttt etatgeaceg aaactgeeaa ggeeagettg tgttgtaeag agateaaace tgttgteete agggetgtag tteteggegt ggtaeegggt teatettgtg tetgtteatg gagtaettgg agaaaaaceg etteaetttg</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct	120 180 240 300 360 420
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 289 tttttctttt taageceagg ctttatteea geetetttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag caatgetgat gatgaggtge tggggteeee gaggaeagga aaggaacegg ceteagteea egeegteeag ggaetgtgge tetgeetete acetgatttt etatgeaceg aaactgeeaa ggeeagettg tgttgtaeag agateaaace tgttgteete agggetgtag tteteggegt ggtaeegggt teatettgtg tetgtteatg gagtaettgg agaaaaaceg etteaetttg gtettggggt geagatgtgt etecacatge egaggagttt geagaacatg ceatettgge cacetteetg ag</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct	120 180 240 300 360 420 480
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct	120 180 240 300 360 420 480
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 289 tttttctttt taageceagg ctttatteea geetetttt gaggaatttg teeeteete teggetgatg egeegteeea teetgggete etagtgtagg ttggeteeag caatgetgat gatgaggtge tggggteeee gaggaeagga aaggaacegg ceteagteea egeegteeag ggaetgtgge tetgeetete acetgatttt etatgeaceg aaactgeeaa ggeeagettg tgttgtaeag agateaaace tgttgteete agggetgtag tteteggegt ggtaeegggt teatettgtg tetgtteatg gagtaettgg agaaaaaceg etteaetttg gtettggggt geagatgtgt etecacatge egaggagttt geagaacatg ceatettgge cacetteetg ag</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc	120 180 240 300 360 420 480
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg ccatcttggc caccttcctg ag </pre> <pre>&lt;210&gt; 290 &lt;211&gt; 289 &lt;211&gt; DNA &lt;213&gt; Homo sapiens</pre> <pre>&lt;400&gt; 290</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc	120 180 240 300 360 420 480 502
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcgggt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg ccatcttggc caccttcctg ag  &lt;210&gt; 290 &lt;211&gt; 289 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 290 ttttcagtca cagaatgtt tattttaaac ttactgtaaa actttcaaat tggcaaagaa acaacagttc acacacaaca tctgccacaa ttctctttga</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc	120 180 240 300 360 420 480 502
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 289 tttttctttt taageccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgattt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggggt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttgggt gcagatgtg ctccacatgc cgaggagttt gcagaacatg ccatcttggc caccttcctg ag </pre> <pre>&lt;210&gt; 290 &lt;211&gt; 289 &lt;211&gt; DNA &lt;213&gt; Homo sapiens</pre> <400> 290 ttttcagtca cagaatgtt tatttaaac ttactgtaaa actttcaaat	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc acaacactg actgccattt tcttaaaggc	120 180 240 300 360 420 480 502
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taageccagg ctttattcca gectetttt gaggaatttg tecetecete teggetgatg egecgtecca teetgggete etagtgagg ttggetecag caatgetgat gatgaggtge tggggteece gaggacagga aaggaacegg ceteagteca egecgtecag ggactgtgge tetgeetete acetgattt etatgeaceg aaactgecaa ggecagettg tgttgtacag agatcaaace tgttgteete agggetgtag teeteggegt ggtacegggt teatettgtg tetgtteatg gagtacttgg agaaaaaceg etteaetttg gtettggggt geagatgtgt etecacatge egaggagttt geagaacatg ccatettgge cacetteetg ag  &lt;210&gt; 290 &lt;211&gt; 289 &lt;211&gt; 289 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 290 ttttcagtea cagaatgtt tattttaaac ttactgtaaa actttcaaat tggeaaagaa acaacagtte acacacaaca tetgecacaa tteetettga ctattatgtg atattttaca atttettea atteettaca tteatggtat</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc acaacactg actgccattt tcttaaaggc	120 180 240 300 420 480 502
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taagcccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctct acctgatttt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg ccatcttggc caccttcctg ag  &lt;210&gt; 290 &lt;211&gt; 289 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 290 ttttcagtca cagaatgtt tattttaaac ttactgtaaa actttcaaat tggcaaagaa acaacagttc acacacaaca tctgccacaa ttctcttga ctattatgtg atattttaca atttcttca atttcttaca ttcatggtat agcaatgtca attttctgc tttgaaaata gttcagttaa tgttctgaaa tgacattttc cttttagtat tctactgctg cccacactga cataattca</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc acaacacatg actgccattt tcttaaaggc	120 180 240 300 420 480 502 60 120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 289 tttttctttt taagcccagg ctttattcca gcctctttt gaggaatttg tccctccctc tcggctgatg cgccgtccca tcctgggctc ctagtgtagg ttggctccag caatgctgat gatgaggtgc tggggtcccc gaggacagga aaggaaccgg cctcagtcca cgccgtccag ggactgtggc tctgcctctc acctgattt ctatgcaccg aaactgccaa ggccagcttg tgttgtacag agatcaaacc tgttgtcctc agggctgtag ttctcggcgt ggtaccgggt tcatcttgtg tctgttcatg gagtacttgg agaaaaaccg cttcactttg gtcttggggt gcagatgtgt ctccacatgc cgaggagttt gcagaacatg ccatcttggc caccttcctg ag  &lt;210&gt; 290 &lt;211&gt; 289 &lt;211&gt; 289 &lt;211&gt; DNA &lt;213&gt; Homo sapiens <!--400--> 290 ttttcagtca cagaatgtt tattttaaac ttactgtaaa actttcaaat tggcaaagaa acaacagttc acacacaaca tctgccacaa ttctctttga ctattatgtg atattttaca atttctttca atttcttaca ttcatggtat agcaatgtca attttctgc tttgaaaata gttcagttaa tgttctgaaa</pre>	gctcctaccc ggcctccagg gagctgtagc aaatggtcgc gtgagcgtgg tcagcgacct ctgtaagggc acaacacatg actgccattt tcttaaaggc	120 180 240 300 420 480 502 60 120 180 240

<400> 291 ttacaaaaga aaacacaaaa ccagaattta ttgaaagtag gtaccagctc tgattagaac	60
aatcagctca aagataccat tactcagaac aatatataca aaaatctcag ggaaaggaga	120
ataaaagaac ttaaaagaat acaacttgaa caggactgtt ttactaaaat ggtcttgttg	180
caaaataata acaaatacca cagagagccc tacatgagaa agccatgtgc cttcaagcct	240
ggggatgagg actctagttc tcaaattctt agaacatagc acatgattct ccaggcagag	300
aggetggetg gagaatgagg accteactge tgactetget taacaaagte catgececag	360
gcacaggcac acatggaatg aggccaccaa gcaagtca	398
<210> 292 <211> 421 <212> DNA <213> Homo sapiens	
<400> 292 tcatcttttt gttcactaat taatttaget gtgataettg gagtatetga caetetgtea	60
agaacatctg ataatgttgt tgagactggc aaatgaagag tacggaattt gtggcctgct	120
ccatacattg gatgctggat gacgtggcta gtagcattaa ttctaccttt gtacagtgga	180
catggagact gaagaaacat tgtcactttc tcatcttcca gcatcaactg taaaaataat	240
cttcgtataa accctgaaat gttcccagat gttggaaggt tccctctttg aggagatgtc	300
tgaaatagtt cacaaagaac ctgtgccatc agcttttgat tattaggatg gcatgaaatg	360
cactqtaqaa aqaacqcaac agttqcattc tcaattqctq tqcqctqttq agtaqtcaqt	420
C	421
	121
<210> 293 <211> 418 <212> DNA <213> Homo sapiens	
<400> 293 tttttttttt tttttttttt ttgacaatga gaaaaaattt tatttatgac	60
qatcttqaqc agtataaaac tcagaagctc cactgaggtg aaggaaacat ggacatgata	120
ctaagcaaag cctagtcttt tccataaaat gaataagaag tacatttggt ggagtttgag	180
accageetgg geaacacagt gagaceetgt etetaaaage attaaageat taateetege	240
atttcgatag ggctatgtag cttttaagta agcaatgtta gaatgagttg tagagtttta	300
tttttgtgaa tatagtgagt gacagatggc aattacatga ggatatttga acgaaggtac	360
ataaqcctaa acaatttcac ctaggtaaaa tattgatgtc ataaccaaac tatatggc	418
<210> 294 <211> 273 <212> DNA	
<213> Homo sapiens	
<400> 294 tttttttttg caaaattaaa atccagatca tatttggaag atagacaggg aatgcttcct	60
aaaactgcct tgaaagtaaa agaaaaaaga cttgtcacca tctttggact gctcctttaa	120
aaaaaatttc attaattaaa aaaatattga gtgcttacta tgtgctaggc attgagctag	180
gagaaggcta tgtggctact aacaggatac acatgatcca tattctgatg gtataaaaag	240
taaaacagga aaaagaaaca gactgaaaaa tat	273
<210> 295 <211> 182 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 295	60
gatcaaaatt gaagacacat tcagaggttt gattggttga gattaactgg tgtggtggtt	120
ggtgtatgta tgtttnattt tnatgtcttt gtatgtagtt ctacataatg caaattgtgc	
tttctgatgg acaagacctc ataactgtga ttaatatcaa taaaaagggg atgttgtgga	180

aa	182
<210> 296 <211> 211 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 296 gatgtaacat ttgtnatttt attggaaaaa gctggtatta acatatttat agttttattc	60
aacaattggg taatttgtga gacaccaaag aaaaaaagaa tgcacctatg agttacagag	120
tccaaactga tcagggctga caacttgacc accatgtntc ccacaccacc acccccacca	180
ccaccaccac caacagcttc gtcctcagag a	211
<210> 297 <211> 407 <212> DNA <213> Homo sapiens <220>	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 297	
tagagacggg gtgtcaccat gttggccagg ctggnctcaa actcctgacc tcaggtgatc	60
cgcatgcctc agcttcccaa agcattgtct tttattttnt attgttattt tntcaacatc	120
taagtattta ttaaggtgag tttttacaaa caagcatcta tcccagtgtg cggggtgagg	180
atgggagagg agagtggggc agcaggaaga tgaggattct catcttttga taataaagct	240
ccagggttca ncccattgtg gatttcatag tcccccagag acacatgggc cttaaaaatt	300
gtgtaccact tetteaggae aatettgtte caaeggggtg ceagtttagg getgeaatea	360
gettettaag ggteecegat gggnateane eetgttggea tttaaeg	407
<210> 298 <211> 445 <212> DNA <213> Homo sapiens	
<400> 298 ggactctctc aactgttgtt tgctcaattg tcggtacaga taggtaggat tccagtctgg	60
agaaacccct aaaccactac accetgeete agagtaggga agaattttea gtatgtatgt	120
ggagacaggc tggattaggg agccttttga gtggcttctc taggatacct ttcttgctaa	180
catgagcaag gttcccctcc aggcctgata aagcctgaag aggttagtta tttccctact	240
agttctggaa gcatcttaat tcatgccacc ataggaggct gtcttcccct gctcctccct	300
tgaatcacca cctagatttt aagttgcttt tctggagttt gatgatggaa accagttcct	360
gtttcaggtg ccagaaactt ttttttttt tgagattgag tctcgctctt tcatgctgga	420
gtgcagtggt gcgatctcag ctcac	445
<210> 299 <211> 544 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 299 ttaatttaaa gaaaacttct ttattaagta aatggacagt tggtacacag atattgcaaa	60
aatttcgagg cgggtacatg aatgactgaa attcaggaga cgcggggagt tagcacagaa	120
gcactttcct cattcagage tettttgget gcgagaaaca gacacccaat caaatcaget	180
tcancaaaat gagagaatgt atcctgacaa gggacgctca cagggcctaa aggaagagtg	240
ctgggccct ggaggactga gggaagccgg cagtccctgg aggcggtgcc ggctgctctc	300
caggogoetg tgattootet ggtooctgoo ttgotatgog tatettooct etgagoagag	360

ccattttctc taccacattc atgcaggtgc ccatcccccg gaacacacac agacaaacac acacacatgg acacagtcan agctccaggg tttctatgtg ttcaggtaag gganctgcaa	420 480
agectgaaca gecteectaa atetagatge ceanetttat cettteaget ceateagang	540
atca	544
<210> 300 <211> 448 <212> DNA <213> Homo sapiens	
<400> 300 caaatccaga attactttat ataaaagtac acattctaat atatgaaaag atattttatc	60
attattactt tactatatat tactgaatac accagactgc attttctcaa atggcaaatg	120
aggcacattt ctctttgatt cccccaggaa cctccgcatc atctgtcttt tggaggattc	180
agattettae gacatetgtg atacegteca tgaggataee aaeggtgett agtagtaaag	240
aacattttgc taagttgttc tatcataggt ccttcctcaa ggtgttcaac tttttcttcc	300
aatctggttt tcagcacttg atcatgtgtt tcttcattat tatgcacagg atctggccga	360
gggataggtt ttgtgtgttc atatggaatg tccacagaag ggtggtagca tactattgtc	420
ctgccatcag aagtcagagc aagctcta	448
<210> 301 <211> 447 <211> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 301 gtgattaaca ggacttttat tggtagtaaa ctagagcaaa caatcagaat aatacatatg	60
cagtattcag tacacacaat aaaagttaaa gaaattcaaa acctgtataa aacaaactgg	120
aqaaaaatca tacaqcttaa qaqatacagt qqtaaaggtc ctctccatcc tttgattaca	180
gettgtacte tgtacteaat agaacttace geacttactg aaataagaaa taaacacttt	240
ttaqtactca qcqtatttaa qattaaqtac attttctaag aatcttgcaa tgacaagttg	300
gtgaccettt agetgetaaa getaaaggga ggaaagtggg aaaaggaaat taactaatac	360
tttqtaacca tttttaatat ttcntatttt ccaaacactg cttttataac agaagtgttt	420
tacacttggc acaatattaa ttacttg	447
tacactegge acadeatead teacteg	,
<210> 302 <211> 282 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 302 ttcggtgttt gtgtctttat ttggagacca ggagacagat tacagcttaa tgagaggaac	60
aacgactaag tgatctgatg ggaagggtga gtttcctggc ccttaggaag caacagatgt	120
gatttctaat caacaaaac tagtaagtct ggaacttttc agacaggaag ctgagaggct	180
accaaaacta aaagtgaaag tgtctgccat caatgtgtaa gtctaaatta cnaataaata	240
cattaataaa gccccnaaca gggggtacaa aaatttgtaa tg	282
<210> 303 <211> 210 <212> DNA <213> Homo sapiens	
<400> 303 ctcaaaaaca tetttattg attttgtgge aagtaeteea cagteaataa etegeacate	60
tgcatatggt ctgcttgcag catcggtctt cagattttca atttgttcga ttacttcaaa	120
accagaaata accagtccaa agactacatg caccccatcc aggtgtggag caggctttgt	180
ggtactatgt aataaacatc aacacaaaga	210
99	

```
Homo sapiens
<400> 304 tttcqaaaca tttctctaaa actttatttc aaagttattc acctcaccgt taataaggtg
                                                                           60
tatgattaat gctctgtgcc agtatttgca ggcctgccca ttgccggcaa tggactttga
                                                                          120
qaaaacccat ttcctggcac ccaaaagtta aattactctt ttcaaaacat accgatctcc
                                                                          180
ccaacacttg caaaagtatt acatgcacca ttttgccacc attctttaaa tcagaactta
                                                                          240
cattattaat ctacatcaqt qaatqttaaa tgaaqtcatt ttaacaaatt atgactgtac
                                                                          300
aaatcaaaat actactagtt aatattagac aagagtatct tacaaacact actattacat
                                                                          360
                                                                          399
attaccttgc aatctggaaa cattatattt catatttgg
       305
458
DNA
       Homo sapiens
       misc feature
       n=a,t,g or c
<400> 305 tcccaacaaa acgcaagggt gttctgctct ttactaaata aacgttccct tcccagaaac
                                                                           60
cagccccaaa ctcatcactg ttcaaatatg tggcaaggtg aggctctctg tcccccttta
                                                                          120
ccaqqaqcac qgatqgtqtc tqcaagqcag tgcctctcga gtcgtcaggg agatggcccc
                                                                          180
tcaggctccc aaacctgcca aatacaggac tgtgagcggc tcgggagggg tctcctttgc
                                                                          240
tetecateca gegggteage gggteettge gggggagaaa gageeaaaca geegeettte
                                                                          300
ccttctggtc acagcacgag ccaggttcca ggcagaggct gtggcaaaca ttgtcatcgc
                                                                          360
cccatggtga aactgggcac ttcctcctcc tcctctgttc cagatgnctc cgnagaactg
                                                                          420
                                                                          458
ctggacccct gctccttggg ctgaccgggt ccttcttg
       306
135
DNA
Homo sapiens
^{400}> ^{306} ttttttttt ttttttagaa ttaaaagaaa aggcaatgtt tattagctat
                                                                           60
ttcataaatc ttctctqaaa aqttctcaat tcttctcact gaaacttgta aqcaactgag
                                                                          120
cagcttctgt ctgta
                                                                          135
       307
418
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 307 tttccaaatc ttcatattta tttccacagt gttaacatgg aatagactta gcaaccattg
                                                                           60
cagagaaaaa aaaaatctct cattggttta tgagttaaat cctgtaacaa tgaatttcaa
                                                                          120
                                                                          180
ccattcgaag tcttctgctg cttaacattt actgaatcaa aggctgaagt aaatgggact
ctcatctagg gtctcaggaa atcacacagc tgggcctcgt gatgtattta cggatggggg
                                                                          240
                                                                          300
attttaactt cttaatacaa gggcaagttt gacaggttac agcccaatgg aggtgcacgg
ctctggtaca nggggtttct tggnccctaa cattcaaagg ggcattttca tgggtcctgg
                                                                          360
tttaattctt nqqqcctcqq qqqqnccaat ttccccatqq gqggggccgg ttttnatt
                                                                          418
       308
441
DNA
Homo sapiens
```

```
<400> 308 tttttttgt tttctacagc accaaagaaa ttcaaatagg aaaaggagag ttgagaattg
                                                                        60
ggaatcaaga atcagecetg tttecatett agecacacea aettatatet ttatgatttt
                                                                       120
caaagctttt gccatgtgat tctgcccca caaaggcatc ggtatttcct aaatggtacc
                                                                       180
tgtatatgca gcgttgtttt ctataccatc cttattcaaa acttgcatgt ggcacaaaat
                                                                       240
300
aggecaagga aaacaaacag ggaccaactt caaatccgaa cttctggatt ctgatcacca
                                                                       360
aaggtcattg atccatggac atcaacatag gggacttgga tcaatttttg ggggtattgg
                                                                       420
                                                                       441
atttccatgg acagtttttt t
       309
450
DNA
Homo sapiens
<400> 309 ttcattttt tgtgtcatca aatctcatga tcagtttccc tttaaagtta acctggtagt
                                                                        60
gctggttcag aagagcagct tttgcatgcc caatgtgtaa gtaaccactg gcctctggag
                                                                       120
gaaatctgac ggtaaccttt cccatctacg cacctggaag ctcaacaaat ttcccaacat
                                                                       180
cttgcttttt ctcaggtgcc actcgagctt tggttgttga aacatcccac ttgggtacct
                                                                       240
actgactgga aggcctgctg ggcttcaaga aagccaaacc aacgttttac atgaactggg
                                                                       300
agetttette tgttteaact gttettgeea ggggageeat tteeetttta gggggtggge
                                                                       360
cccaaacaca ataaatcctg gcttaaactc aagggaggtt tcccaactaa ggtatggttc
                                                                       420
tcaggaggac agggcaatgg attgaggttt
                                                                       450
       310
488
DNA
Homo sapiens
<400> 310
tttttaaaac ttttaactaa aaagtaaact ttaatgtcga aagtgcaaac ttggggaagg
                                                                        60
cagaaaacat cacacacaag gctgtcactt cacacttgga aggttgcaca gcggccgggc
                                                                       120
agaggcgctc ctcacttgcc agacggggtg gcggccaggc agaggtgctc ctcactttcc
                                                                       180
                                                                       240
acacggtgtg ggggccgggc agaggtgctt ctcagttccc agatggtgct gggctgtcgg
actecattge tggatgtgtg acttgggttt aagettetee ettetgetet catetggaaa
                                                                       300
tgctgacage ctgggcattt cetectttgg caetggagae tgaageetgg caaggeetge
                                                                       360
cctcagcagg aactccccct gggccccact ctgtgacctt gagcccaaga caggattttt
                                                                       420
cctttacctt cttccagcca ctttgggcct cccggctctc tcagaagccc tgttaggtag
                                                                       480
gtgacaac
                                                                       488
       311
390
DNA
Homo sapiens
<\!400> 311 ggctttcata attatattt tcttttaaag aaaaatatca acccattgtc aatgcactgt
                                                                        60
ttttcaaagc atttaaatag agggtaaaac cctttggaaa ttaatacaga agaaatgatt
                                                                       120
cactttatgc ataaaaaata aataataata tagctgagac atgtggtttg cttctgctct
                                                                       180
tgaagatgtg aacagcttct aagcattcat tttctctgac ccatacaaca gcttctcagt
                                                                       240
gatacagggt ttaatttaaa cacatacaat gtccaccccc aaaccttctg cccacatcta
                                                                       300
caagttttat ttattttgtg ggttttcagg gtgactaagt ttttccctac attgaaaaga
                                                                       360
gaagttgcca aaaggtgcac aggaaatcat
                                                                       390
       312
484
DNA
Homo sapiens
<400> 312
ttttttttt tttttaaat gcaacataca aactttattg aacaaaagta aactgtttca
                                                                        60
```

gtaaactcaa acaggcactt aagagaaaaa ctgactggaa gaacttttat cttaaacatc	120
ttacagtaac ctacttgcag ttgcatttaa ctgagctctg ttgctgtgaa gaatacagct	180
catgcacagg tatggatgaa agatttgtac atttctcaag tattcactga atactacctt	240
atatacacat atacattaaa tttgaaaaag atttgacgat ccccagataa acttcatttt	300
tgttgatctt ttggaagagg tcgtctaaag agaagaatat gtggttctgg ctcatgaatc	360
atqqtaatqa acccaqccta gactctgttg gacaccaagt ctcctccact cctcttcaga	420
catcagatga gttttaggta cttgtttgga aagttctctg gggtaacata acatgccggt	480
acta	484
<210> 313 <211> 287	
<212> DNA	
<400> 313 ttttttttt tttttttt ttctatctgt gaaaaacatt tattctgaga atctaaaatc	60
tggacaaagt actggacttt agaaaaagcc tacacaaaat tgtctcattc ttccctaata	120
cattaataat ctaagaataa ggaggtgaaa aaaacccttt aaaaataaca ttgctccagt	180
ttgtctgcag gtatgtgatt taaaatatcc ctgttttatt gaggtatagg ctgcaaactt	240
tqqtaaaatt aqqaaaaatt aacaaaccct ttcaaaaqaa aaaaaat	287
<210> 314	
<211> 401 <212> DNA <213> Homo sapiens	
-	
<400> 314 ttttttttt ttttcccgca gtcacaaacc attttattac ccacattgtg ctgtgacagg	60
gaggggtete caatgaagag gacetageae tggaaggtga tageeccaga agagaagagg	120
cttctttctc actgtgaggc agaaacaaat ttatctgtat gtaaactttt ccagtaatgg	180
gtgatgctgt gacacctgca gaaagcagcc tccctctgtt actactataa acacccattc	240
tgcaggcagt gtgagggcac agccttctgg agtgccacac ctgggtacca cggcacactg	300
gtgcatcccg ggaagatgtt cctagggcac cacatcttgg gtaccaagag gactgtgtgc	360
atccaattag accgaggtgc aaaagccaat gcgtcaacat c	401
<210> 315 <211> 533	
<212> DNA	
<213> Homo sapiens <400> 315	
ttttttttt ttttttt ttttttggag tttaaaaatc ctttattaaa aaaccccaaa	60
cggaaatgtt ccaaaaaaaa taaacacgtt tctattaaca tatcccatta atcctattag	120
ttggaataag atttaaagcc caatttggaa aagcttgcag aatttcttcg gaaattccta	180
aaaattacgg taggcaaaaa cttacaaaaa catatgctat cccagggcgg ggaaaggaaa	240
aaaggggaag gggctacaaa ggccccgggg gcatcacctg cccacctggg acccaggggt	300
ccgggaaact gtcccgtaac gggaaaccta ccgggatgta aaggtccata agttacaagg	360
cttttttggt ttaaaaaaaa aaaaaggtct gtactttcca ggccaaaggt gaaatggccc	420
aaacacccct taacgctttc aggtccccca ggccctccat tggggtggga ccccctagga	480
acaatttcgg ggtacaaact ttcccggaat ttaggcggaa actgtccggg aaa	533
<210> 316 <211> 384 <212> DNA	
<210> 316 <211> 384 <212> DNA <213> Homo sapiens	
<del>-</del>	
<400> 316 ccgtgtcact tctcacttct aaatagctct agacttggtc ccattgcact aacttaattc	60
actetecate atetttgget tggagtacaa eteegteett ceatetaate tgeetgtete	120
caatcgttct cccctttgat gtgcagggca gccactgatc tctctaacat ttacagaaga	180
atgcaccact tgggttgttt aaaacccttc aatggcttcc cattgcccca agttcaaact	240
ctgcaatgtg gcctacacat ctctctagct tcacctcctg ctcaatatcc tacagcacag	300
	•

<210> 321

tgaac	attett	ggtggtcctc	aaaaqqqccc	tcaaacttca	aacattccct	tcaacctaaa	360
_	=	gacattactg					384
-010	217						
<210: <211:	> 317 > 446 > DNA						
<212 <213	> Home	o sapiens					
<4002		ccctggatga	tgattaccat	tgttgctaat	agtttttatc	taaqtaaqcc	60
		ttctttcaga					120
		tgttttttc					180
ctati	ttattg	tttacattta	aaattaggtg	caaacagcta	gtttctcaaa	tgacctccta	240
attga	actttt	tttctttaag	ataaaagtat	tggttgaggc	actggtttat	aagcatttgt	300
ggact	tttgca	gccttatctt	taaaaaaaaa	aaaattaaaa	ctgtggtcct	taaatatcct	360
gtct	gaactt	tggattggaa	ggcacatttc	$\operatorname{cctttgttat}$	tggctatgta	gattagctta	420
gaat	ctgtaa	gcatatagtg	tggtta				446
<210: <211:	> 318						
<211: <212: <213:	> 470	,					
		o sapiens					
<400: tttt		tgtgacaacg	tttttaatgc	aaagtcaacc	attagcatct	ttcccatgta	60
cttat	ttagat	gtgaaatggc	aggacttcac	ggccccgttt	gcatattttc	ctactccgca	120
gacga	aataat	attttcaggg	aaggcagcgc	agtctgtgcc	gtcacaatcg	ggcgactgtg	180
ggtg	atgagg	gatgatgatt	ttccaggagg	ccctggggtc	agaggactcc	tagagggagt	240
ttcca	agcccc	tcaatcgcag	atggatggcc	tgttgatgtt	gtaactgggg	tggaagttga	300
gccg	gtcaca	ggaggtgatg	cagttatcgg	ggccagtcac	gatgcttttc	tccaggtaaa	360
catt	gagagt	attgttccgg	aacattccac	ccgctgcaag	ttgttgggaa	aatttattcg	420
aatti	tggata	aaatacttta	ggcatctcgt	gcacggtggg	ggctctgctc		470
<210	> 319						
<210: <211: <212: <213:	> 401 > DNA	o ganiang					
<400		o sapiens					
		ccagtgttta	ttagcaagat	ggaacccaaa	ggcggctgtg	gcctgggcag	60
caga	aggcca	ccaggagccc	ccacccatct	acccaactgc	ccccagagc	taattacatc	120
caca	cccatc	ccctgaagtg	gtggacataa	gggagccctg	gggagcctct	accggcccca	180
		acggaccccc					240
		gctatgctcc					300
_		tggccctgcc				aggggctgtc	360
ccac	ccaggc	aggatgctct	tctcctatcc	ccaataaata	g		401
<210	> 320 > 403						
<210: <211: <212: <213:	> 403 > DNA	o ganiong					
<400		o sapiens					
tttt	tttggč	tgttaaaacg	ttcaccccca	caaaagggga	gtggacagat	ttattgaaat	60
caaa	ctggga	aaggagcagc	tggacggctg	gactctgggc	ccagcccagg	ccccgtctgc	120
		cccttgcaga					180
		gttacttcca					240
		aaagtcacat					300
		gctcaggagc				cggcctgggg	360
ggtg	tgggtg	ggggctgcca	gccttgcagg	gggcctaggc	гgg		403

<211> 225 <212> DNA <213> Homo sapiens	
<400> 321 ttaagaacaa agcggagggg tttattatag ggacattctg aaaccacaac ggaaaagatg	60
teegtacagg tggatgggga tggagateca gegteggagt acacagaett cagggggeet	120
cetgeetgge acgttegtte gtetecegta tegeegtaag accetgagae eeegageete	180
tgcaggagag acgcacaaag aagcctcctc cctgtggcct ggctc	225
<210> 322 <211> 253 <212> DNA <213> Homo sapiens	
<400> 322 taactcccag tcaccctgtt ttatttcaac catggagaaa agtacagagg aaaggctgca	60
tatggagaga ctgtcgggct gacggtgtca cagcagatcc gagtccacgt gtggaaacag	120
cagccgcccg gccctgggtg tttcctccag gaaaggcctg gtcagtgaat gcctgcaggc	180
agcagggtgt caggaatcac ctgcccgatg ccagcgctgc tcttgtctgg agggccagac	240
tgtcatgaag tca	253
<210> 323 <211> 345 <212> DNA <213> Homo sapiens	
<400> 323 gggttaaata tttattaggt ttgttttaat caggaataaa tacatgattt agcaaagtgt	60
aatgcttccc actgagaaat ccctctgggt gctccccaaa tgttccaatc acattcgtca	120
caacggaaaa caacacataa gatactgtgc agacatctgg agttcagggg gtcacctgcc	180
ttatgcggga agtcaatgtc cacagtgtta cattcatttc tcatacgttg gctggttcct	240
ttgaaatagc cttttggaac ggttggggaa accacagatg tctccttgta taaacacact	300
agaatctatg atacagaaaa ctgtgtaact gcacatacac atacc	345
<210> 324 <211> 382 <212> DNA <213> Homo sapiens	
<400> 324 aattetttt tageteattg getateetta gegtacatta tgtatggeee aacacaatte	60
ttcttccact gtagcccagg gaagccaaaa gattggacac tcttgtttta aatagactat	120
ctttttaccc ttttatttgt tccaactcag gataaatatc caagtatcta gagggtctat	180
gtgtgctatc tatacaataa aagatagtta tataaaaatg aagagttctc cataccatta	240
tataaacagg aggttttaca ggcattagtg atactctgtt ggactcaatg ggtttttttc	300
tctcttatag ctatgaaaga ctttatgcca gtccaaaata tacaatgttg aaagacaggt	360
tttgaaataa atattctccc ca	382
<210> 325 <211> 519 <212> DNA <213> Homo sapiens	
<400> 325 ttttttttta atggtttgga ctgcaaacta gtacttaggc tttcagcaac ttggcagtgt	60
ttgtctgatg cagatactgc acccagtttt aaaaaaaggct tattactaaa taaactagtg	120
aagttaacaa ctgaaggagt aatagtatga atgctggatt cagaagtcaa acttggcttt	180
tttccaaggg aagagettat tettggaata tetatatggg tagtttttga ateatttace	240
tctttatcaa tccctttaca ttcaatactt atactatgac caactgacct atgaccaacg	300
ttcaagtggg tactttcaga agtaaactgg ttctttccaa cagattcaga aatttcttcg	360
attagttctg tagtagaact taaaagtaat ggattaggag ccaactgtga agaagtttca	420
gggggacttc tggttaaagg attaacagat acagtaggtg atggggaagg gaagatgctt	480
tccccaagtg cccgaagggg attaggggta aatacccca	519

<210> 326 <211> 393 <212> DNA <213> Homo sapiens	
<400> 326 aaattaaata aacttttatt ttggaatgat actagattta cagagaagtt gcagagatag	60
tacaaagagt teetgtatac cetteaceca geetaceeca aggteaacat ettacateac	120
catggtacat ctgtcaaaac caagggactg aaattggtat attaactaaa attcagactt	180
ttttcagatt tccaattttc ccactaatgt cctgtttttg ttccaagacc caatccagga	240
tgccacattg cactgaagac actctccctt ttcaattcta ttactggtca cctcagtcaa	300
ctttcccggg gaaagagaat gcatgggaaa agctcttgtc cttattattg aactggagaa	360
actgaggctt aaaagtgccg agtgaccaag ttc	393
<210> 327 <211> 277 <212> DNA <213> Homo sapiens	
<400> 327 tgccgtccyc cycccagsgt gcctggcatg gtcgcagggg agcgggtbcc tggagtcccg	60
gtgacaccac ggggcacact gagggagctg aggagccggg gccgcgcasc tcctggdtgc	120
tcagcggatc gtgtacttkt cccacttctt ttcagggtcg tagggttccc agcggctggc	180
gggaaagatg tgcttkttct tctcgtacca gctcctcagc accaccttgc ctgcatgggr	240
ctcatccttc tccacagtgg gsgtcactga gcaaccg	277
<210> 328 <211> 204 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 328 actggagtct tctgagatct tattaaatgt tttatttctt aacattccta catattaata	60
aatgteetat ttettaacet gatagtgggt acatgaatgt ttatnattet gtaaateata	120
ttgtgcttat gaatngtttc acaattaaaa aaaaaattca tcccacctat tcccnttgcn	180
caggttccat gctcattaaa gacc	204
<pre>&lt;210&gt; 329 &lt;211&gt; 410 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 329 ctcataaaca annantttat taaantacat gttacataaa agaacatata aatggaccat	60
taaatacatt caqtttattt taaacaaatt tacatagata cttatttaca tttctccatt	120
gtattcttaa attattttc caagcttact accgataaan ggtaatacaa tgatcatctg	180
ctcacacaga tgcatagaga agttgtccac agggctnagt aaagcaccac ttcccagggt	240
nacacngctt attagatctt ccagcaacaa ctcatgctga aggtgctctc ttctgaggca	300
gcccttgagg gtgaggcttt tgctttagga ggttgctggg gggttgggtt	360
tgacccgggg cagcggatgg ggtccttgct gntttgaccc gacttgggac	410
<210> 330 <211> 319 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	

```
<400> 330 ttttttttg ttgagcagtt gtttattctg gccctcacag ccttggtagt tccacaaagg
                                                                            60
ccctggggat ggggaacagg ctacaggaac ccacctgtct tcctggtcag ggcccctggc
                                                                           120
ctnagncagc aggccaatcc tggtngggca cagggttctg tgctgttggc tgcctacctc
                                                                           180
tgaatateet ggccagcaag ccatgeette eeegeeeetg ggccetggga geenttnage
                                                                           240
                                                                           300
tectnteece ataatgggte etgggeetag gatgagggga aggteecagt ttettgtagg
                                                                           319
gtnttatcta ggggtnctg
       331
348
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 331 aanttgtatt ttttgtagag atggggtttt accatgttgg gtaggctggt ctcaaactcg
                                                                            60
tgageteagg tgatecacee geeteageet eeaaaagtge tgggattaca ggtgtgagee
                                                                           120
accacacctg gccaatgggc atnttctttg gttgaatttt aaaatattat tttttatcat
                                                                           180
ttaccatttt ctagggcatt ttaagaccca atttattctg ccacaatcat gtcatcagaa
                                                                           240
tagtcaaatg aaatgacttt catttgaatt ctcactatta agatttaaaa ttgtggaaaa
                                                                           300
ctaaagtggg gattggagta gactgttagg gattagntcc taggatgg
                                                                           348
       332
419
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400×
       332
ngagccagaa aaggattttt tttaattcaa gtaactgaaa taggaaacca gagggggagc
                                                                            60
cccaggctgg gataaatcat ggctacccct ccccaacaga acagggggag gaggtggcc
                                                                           120
ctacacccat tatggtcgat tcgggccccc ttgctcactc tgctgcagca tcctagaggc
                                                                           180
agggccccac cttccctggg actggggtag tcggtcaccc agcctgcatt gccccagccc
                                                                           240
ctnttcccca caaagagtat cttgggggag ggnttcgtgg ggcagaacag gagggcaatg
                                                                           300
                                                                           360
agggatgaac attgctcaaa ctcctttcaa aggggcacct gaccgcacag gggaggntgg
gcaggaaggg caagggntgg gggatgccgt ntaaggaggg cggangcagg canttttgg
                                                                           419
       333
353
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 333 aaacatgttt attagaaaag taaaaaatat tgcataggnc ttaatacttg aacatcaagt
                                                                            60
                                                                           120
qtattcatqa acaqtgagta tcttancttc atgtaaacag tnctagatgg aagacccaga
tggcactcct cccggggngg gntnccagcc cccaccctct cagcccctcc cctgccagct
                                                                           180
caactetgca gtacacgatg ggggaagget taaacgcage tgccaggggg taatttttca
                                                                           240
agtgtcaaag ancccaagtg atccctgnac acccaccct tcctactctt acattcatgc
                                                                           300
                                                                           353
ggtctgtaag ataggctgcc tacaacaggg tcagtaggng atggctccga tcc
       334
195
DNA
Homo sapiens
```

misc feature

## $\langle 223 \rangle$ n=a,t,g or c <400> 334 cataatacat atatttattg ccatcagagt tctgcaattc tcataaaatt agagtcagat 60 120 ggaattcagg gacacgtgca agttttggaa atggacacag ataacagtat agaactgtac acaaaataat taccatttat taaacacact qqtttaqnac accctggatg gatgagaatg 180 195 ngcnccataa ttttt 335 295 DNA Homo sapiens misc feature n=a,t,g or c <400> 335 ntnaaatgtg taatataaat ttattctgtg acattttcct cattgagaga tattttaaca 60 tagattaaaa tacatcaata tttcatgaaa aataaattct agaagaattt agataatatc 120 tqtaatgtac atgatttgac cctgaatatc ctnttcgtnt tncacttcaa acatcatttt 180 240 ttaaaaagta acataaacat gataaggact gcaacattct tcatatatct tgngtctcat aaattttaat tcaactgccc gttcttttcn caactatgta tgttaatggt atttg 295 336 441 DNA Homo sapiens misc feature n=a,t,g or c $^{<\!400>}$ 336 aacttgttaa acacatttat tgatttcttg acagtaacca aacacagtga gtgaccatta 60 taaacaagaa aagaaaggca ttcgttttgt actttgtgag atctggctgc acctggagag 120 aaaacatacc cctttcccaq gaacttacaa qgcaaagtgc attccttcac gggagcatca 180 caqqqqqqca tqqcagtttt gaaacqcaag aagtctgtcg cctgctatct caggctgaag 240 ctcacctcat gtgaatgatt gagccatgga cgtggaatta aagtcatact tgcttagcaa 300 atqcattcct gattgccaca aactcagtaa aaactggctg caaatgaaca aaacatgtag 360 atgaaggaac aagtgaaatc aaagaatgca gttgcatgga gccagggctt agcctgtaag 420 gaaggagaac agaccanagc c 441 Homo sapiens misc feature n=a,t,g or c <400> 337 cataatgcta atgcaagagg gcttgaagta tcaaagagtc cacaggaaat ggatgccccc 60 agtaatatct tttttttaaa aaaaatatac attatataat atatattata tatataanan 120 gctagtgtaa atgcttccat ggtgtggtca caaatttgaa agatgaacct cctttcagct 180 gttaaccatc ttcccatttg caacaggttt taaaaagtcg tttttatctt ccnacataac 240 300 atgnntttnc ntaatgaggt tgccagcact gacagatgtg gtgatgggga ggcaacttgc attgctaata gacactggga gtggctggct aaagcaagaa gttaccggca gaattgtttt 360 ttgctcctcc agaatcacat ggtcttcacc taaactctgt ttcttctgct ttggtggctc 420 437 cntttggtgc ngctgga 338 178 DNA Homo sapiens

```
<400> 338 aatacagggt ctcactctgt tgtgccagct ggagtgtagc agcacaattg tagttaactg
                                                                           60
cagcttttaa ctcctgggct taagaaaagg ttaagagatc ctcttgcctc agctttctga
                                                                          120
gtagctagga ctacaggtaa gtaccaccag gtctggctaa ttttaaaaatt tttttgtt
                                                                          178
       339
575
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 339
tttttaaata gagatgaggt tttgctatgt tgcccaggct ggtctcctgg actcaagcaa
                                                                           60
tctcccactt caggctacca aagtgctggg atttacaggc atgagcacct ctcccagtct
                                                                          120
                                                                           180
caqttattat tttaataaat gagactgaac gtcctcttat aaggeteact cccttgttee
tactacattt gctctgttta agtatctctt taaattcttc agttaagatc atccctttta
                                                                           240
                                                                           300
tcaqaaacct aqacaccaca aagtagcttt ctcaccttta attctccata gggatcacta
                                                                          360
ttatactata atatttgcat acgtatgtgt atatatgtat ttgctttttt aaaaaagtaa
aaatgctctt ctcactcttt gtcgatatag gcacccaggt acgtagttag aaattaaata
                                                                           420
aaggccacaa taatttccca agggaagatc attaaaaaga aaaatccttt cttcctctaa
                                                                           480
tatcacatag ctgggcctta tggnatgcag ctaagaaaaa gggattgcct nggtgacagg
                                                                           540
                                                                           575
aagaccaatc ttcncccttg gggtgtagng gaatt
       340
472
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 340 tttttttgtt cttctatacc atttaattaa atatgagatg gttattacat acattgtacg
                                                                            60
                                                                           120
cttatatact aagcagetet geganaatgt ttgtaatgea tgtggatagt acaeggteaa
atcagagatc ttcactgtag tgaacaatgg atattttaaa gaatagtccc aacaataaac
                                                                           180
cacagagetg acaaaaatge cacetaatet geateattte caggagetet gecacatatt
                                                                           240
                                                                           300
cttcctggcc cgtaccaagt ctcttagccc ctctagaaga gctgagaaaa tgcaggtgtg
                                                                           360
cacctctgaa cagcccatac ttggcttttc tgaagcaaat tcccatggaa accacattga
aggaagaggc aaaggctggt aggaaatcag ctgaangctg ggtgccctag acccagtcat
                                                                           420
                                                                           472
gtttgttggc caattagctg gcttttcatt ncatgctata tagaactggc ag
       341
366
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 341 ttttgagagc tgatgacaga caacagcaag ctactttaca gaatctacca actgggtagg
                                                                            60
aaagtettet gagtttettt geagacaaga aaagttaeet gttgattgtt ggeeaateaa
                                                                           120
taagggactt teetetetge cattaagage aacgatgetg accaeatact etgtgeetgg
                                                                           180
agtgaggttg gtgagggtga tggaatteeg agagtgggge accegatett etegaggtet
                                                                           240
                                                                           300
cccactgaag tgctcgggat gatggcggat cctgtagcca gtgatggtgg ctcgaggagc
aatccagtgc acagtaaaag agttggcagt aatatccaga aaagtcaata cccatttggg
                                                                           360
                                                                           366
gantca
```

```
Homo sapiens
       misc feature
n=a,t,g or c
<400> 342
ttttttttt tttttttt ttttctgaga tggttctcgc tacgttgcct aggctgtagc
                                                                            60
gcagaagcta tacacaggca tganggcagc acactacagt ctccaattcc tgggctcaag
                                                                           120
tggtccttct gcttcacctc ctgagtagct gggactacag ggacgtgcca ccccacctgg
                                                                           180
catgatacct atttcacaga ntctgttact atagaaaaac agctctccta ctcacttttt
                                                                           240
                                                                           295
tcttgtaaaa ttgtataaca ttattaggca aaactgggag antacaantt ttaaa
       343
281
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 343 caaggttcna anggtttatt agggagtcgg gagggagaaa acccagggag tcccccaggc
                                                                            60
                                                                           120
catccacatt gctccccggc atgtgacgat ccagcctggg ctttctctgg gtcctttctg
                                                                           180
qacaqaqqct qqccaaqcaq gcagcaqcct caaggggagt gggtaggagc tgggggcctt
                                                                           240
ctggcagccc tactcagagg atgatctggt tggtgaagct tcggctcagc tccttgtgtg
qcaqaacant cqaqttcaqq atgagcacct cggcagggat c
                                                                           281
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 344 ttttntang aaatgacaag taccgtttat tgtcgttaca caaatgaacc cagcctctgg
                                                                            60
cttgggcacc gtcccacgga ccagcagatg agcatggtca gccgacccct ttccccaccc
                                                                           120
ccgagtcatg tgcagtcata cantccaggg agaaagtcgc agtntcgant accggacaca
                                                                           180
ggttcccttg gnttggtggn gcatctntga tccacagant ggcccacctn tcggagtggc
                                                                           240
caacggagtc gntgaaacgt tgtcaaataa gncaagtaag tgcaggagcc ctggggntgg
                                                                           300
ggggcctntg gcttntgnca gccgggtggg gaggagggat ntccaaggtt tctgcggggt
                                                                           360
agggcctcgg cttccanacc tc
                                                                           382
       345
404
DNA
Homo sapiens
<400> 345
tttctaattg agcaacttta ttcacataat ttctacacca agaactcgag gttatctctg
                                                                            60
atqqaaccaa tttcactaat atttacttta agggcagaga agtcaaccaa gtcctcacag
                                                                           120
                                                                           180
tctcaagaat caaaaacaaa acaaaaatac aaacagagag caagtgggaa gataaataac
                                                                           240
actccgaaat aacctagcta cacactttta gtttccaatt tttctagcat gaaatcactt
                                                                           300
ttctcttcca tcctgtaaga cgtgttctct cctctcttt ctgagttggg ctgtgaagag
ctgccctggg tctcccgggt ctgacgggtg ttgtccaccc catctgaggg cacccagggg
                                                                           360
                                                                           404
aattgccctg ggggtccgga gccctggggg tttctggata gcct
        346
391
DNA
Homo sapiens
```

<220> <221> misc feature <223> n=a,t,g or c	
<400> 346 tantnntcca gctctttat tgagatcagt ggtggctctg aaaagcgtnt tt	ngggtttt 60
agaagtaggc gttcgctaat ttcttcttgg gcgccgcttc ttaggcttga ca	accttggg 120
cttagcggcc ttggnttcac agccttagca gcacttttgg cagctttctt gg	gcttcgca 180
accttggcct tctttgggct cttagcactt tcttggttac agtggccgcg gc	ggctntct 240
tegetttett eggngtttte ttagegetet tetteggagt tgegeegeea ge	egeeette 300
ttgggcttct tggctncccc aactggcttc ttaggtttgg gtccgcccgc ct	tttnaacc 360
ntggggettg gnetteeeeg gagettgeet t	391
<210> 347 <211> 431 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 347	tatqaact 60
aaccggatgt ctcagactgt aagcgaagga caaatttgtg agatttgggg to	3
cttcagagag tatgatgaat ggaattttct tcacattgac tacgaggctg aa acttaaggac gaacacaatt ccatcccgta atccattagt cacagcctca to	5 5
gcctccactg tgtagagagc cagcggncct tgtcatattg cagggtgggg coggtaccgttc taggnaggcc ttgggggtca tgccngttgg tgatgcagaa gg	5 5
ctgcaggatg ctctcccatg ctgtgggtag ttctgctgcc ggggtnatgc gc	
ctnggagagc cctgggccat nggaggggaa aattgcctng ggcngcctcc ct	33
teactneect a	431
<210> 348 <211> 18596 <212> DNA <213> Homo sapiens	
<400> 348 cctgtagtcc cagctacgcg agaggctgag gcagcagaat tacttgaacc ca	ggaggggg 60
aggttgcagt gagccgagat cgcgccactg cactccagcc tgggtgagag ag	33 33 33
tgtctcaaaa aaaaaaaaaa aagaccgcca gggctcaaac aaaaaacctc gg	
tggcggtctt ttttttttt tttttttt ttttttggga cagtcttgct ct	-
ggctggagta caatggtcgg atcttggctc actgcaacct ctgcctccca gg	ttcaagca 300
attettetge etcageetee caagtageea ceaegeecag etaatttttg ta	cttttagt 360
agagacgggg gtttcaccat gttgtccagg ctggtcttga actcctgacc to	aggtgatc 420
cacccgcctc ggccccccaa agtactagga ttacaggcgt gagccaccgc gt	ccaqcqcc 480
ctggcggttt ttaatcaagt agaaaagctg cattatacca cttgcttcgg tt	
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to	gcttcagt 540
	gcttcagt 540 tcaaacag 600
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to	gcttcagt 540 tcaaacag 600 gagaaggc 660
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta	gcttcagt 540 etcaaacag 600 gagaaggc 660 etgcatcca 720
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca co	gcttcagt 540 etcaaacag 600 egagaaggc 660 etgcatcca 720 eccacaccc 780
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca co ggttcccggg tttcctaaga ctctcagctg tggccctggg ctccgttctg tg	getteagt 540 etcaaacag 600 gagaagge 660 etgeateea 720 eccacacee 780 gaeceege 840
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca coggttcccggg tttcctaaga ctctcagctg tggccctggg ctccgttctg tggtggctcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc gc	gcttcagt 540 etcaaacag 600 gagaaggc 660 etgcatcca 720 eccacaccc 780 gaccccgc 840 gggtcctg 900
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca coggttcccggg tttcctaaga ctctcagctg tggccctggg ctccgttctg tggcgctcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc gcgagcaggaa gaggcggagc gcggggacggc cgcgggaaaa ggcgcgcgga ag	gcttcagt 540 etcaaacag 600 egagaaggc 660 etgcatcca 720 ecacaccc 780 egacccegc 840 egggtcctg 900 ecgtcccgc 960
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca coggttcccgg tttcctaaga ctctcagctg tggccctggg ctccgttctg tggggctcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc cgagcaggaa gaggcggagc gcgggaacggc cgcgggaaaa ggcgcgcgga agccaccgcgc acttggcctc cgtccccgc ccgccgccac ttggcctgc cgcgccactt cgcctgcct cgccccgcc acaggagcgg cccctgcg acaggagcg cccccgccgc acaggagcg cccccgccgc acaggagcg cccccgagcc cgccccacc	gcttcagt 540 etcaaacag 600 egagaaggc 660 etgcatcca 720 eccacaccc 780 egaccccgc 840 eggtcctg 900 eggtcccgc 960 eggctcgga 1020 eggtccgcc 1080
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca coggttcccggg tttcctaaga ctctcagctg tggccctggg ctccgttctg tggggactcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc gcgagcaggaa gaggcggagc gcggggacggc cgcgggaaaa ggcgcgcgga agccaccgcactt cgcctgcctc cgtccccgc ccgccgcac ttggcctgcg ccgcgcactt cgcctgcctc cgtccccgc ccgccgcgc atgcctgtgg ccgcgggaagcgcgcggagcgcgcgcgcgcactt cgcctgcctc cgcccccgc ccgccgcgc acgcccgagc cggcacgggagcgccgcc ccgccgcgc cggcccttgc cccccgccgc acaggagcgg gacgccgagc cggcacgggagcgcgcacgc ccaccggggagcgcgcc cccccgccgc ccaccacacaca	gcttcagt 540 stcaaacag 600 gagaaggc 660 stgcatcca 720 scacaccc 780 gaccccgc 840 gggtcctg 900 scgtcccgc 960 ggctcgga 1020 scgtccgcc 1080 gtcaggaa 1140
gagaacgaag aaatggaaat gcaaatccct tattagttgt aggaaacaga to cagttttgtt gacaagaccg caggaaaacg tgggaactgt gctgctggct ta gcggtcgacc agacggttcc caaagggcgc agtccttccc agccaccgca coggttcccgg tttcctaaga ctctcagctg tggccctggg ctccgttctg tggggctcctg cgtttccccc tggcgcacgc tctctagagc gggggccgcc cgagcaggaa gaggcggagc gcgggaacggc cgcgggaaaa ggcgcgcgga agccaccgcgc acttggcctc cgtccccgc ccgccgccac ttggcctgc cgcgccactt cgcctgcct cgccccgcc acaggagcgg cccctgcg acaggagcg cccccgccgc acaggagcg cccccgccgc acaggagcg cccccgagcc cgccccacc	gcttcagt 540 stcaaacag 600 gagaaggc 660 stgcatcca 720 scacaccc 780 gaccccgc 840 gggtcctg 900 scgtcccgc 960 ggctcgga 1020 scgtccgcc 1080 gtcaggaa 1140

gagaggtgac gccgcgggcc cctgcgggac gggtggcggg aaggagggag gcgcggctgg 1260 ggagageget egggagetge egggegetge ggacecegtt tagteetaac etcaateetg 1320 ccagggaggg gacgcatcgt cctcctcgcc ttacagacgc cgaaacggag ggtcccatta 1380 gggacgtgac tggcgcggc aacacacaca gcagcgacag ccgggaggta agccgcgtcc 1440 cageggetee geggeeggge tegeagtege eecagtgatg eegtggeeee egaggeggge 1500 gtcatcgggc agcgtttgcc cagtgctgga gggttaggga gagctgcctg ggcttgaccg 1560 egegeeggte teaaagteet ggetttggee ceteeteegt ttteeeetgt ggaceattee 1620 gcttcgcagc gttttcaaaa actggagcga aagtgatgtg ggcggggcaa aggcggcggg 1680 aagaggacag cactgaagct ggcgcgggaa cttggtttcc tggtggcctc ccatccaatc 1740 cccacgaacc agctttcctc ttaaaccttg aaaagagaaa ttcgggagtt cgagttctta 1800 gtcgtccttt cctctttcct ttccgacagg agcaccccag gcaaaaaatg tctcgcgggt 1860 1920 1980 cagccgttgg ccctccctaa ggccacaccg tcctgccgtc ctggatcctg cgccagctgc gegggggagg ggaetegaag gtgtgtgage caggggetga cettgacege teagataaat 2040 ggagcgcagc cttgacacag gggtggaggt ggttttgaat ggggaaaccc attcgtggtg 2100 2160 aagcagatte actgtageta geggaaaage ceteeggeee aeggaeeeat etagagaega atacatagca gctgctgtgg ctgattggcg tgggacagcg tggggagttt tgtctgagga 2220 gagggatcca cttttctgca gctccaagcc caggggcctt tgatgagcca tagacctcat 2280 ttttaaccca cctttctgct tagacattga gcaagttact tctcatatag cttccctata 2340 tgttaaaaat ggagaaaata atgcttagta ggcaattctg ataaaagcag gtgcttgcaa 2400 2460 aaatetetet gttgtetgaa tataaaetgt aecacaageg agtgeggatg aaegaggaet gcatttaaag ataagttttt acactttcat ttctctgtgg ctcgacactt ctgatgcctc 2520 2580 cctttttgtt cctgggacac atgcttggtg ttgtcttcac acctttgtga caggattagc actagtggge agtggatgat ageteeteet eeettttgee acatgtteat eeetgeeete 2640 2700 gccaccatct cactgtgtgg aattcctgtg tccactggtc accggggcac agaagtgctg 2760 teteageetg aategggeea etgatgggae ttgeageetg ggageteeae egtgatetet ggcccacttt gcgggagtct aggctttctg gatgctccag gcctcacgtc ccagggcagt 2820 tttcttccct gaagaaagtt ggatggcatg atctgtcttc ccatcttgaa accgtatggc 2880 aaattgtttt tcagatgaat tccctctgct gacaaccaaa cgtgtgttct ggaagggtgt 2940 tttggaggag ttgctgtggt ttatcaaggt aaagaagtcg ctgctattag aagtcagtag 3000 3060 tctgttctca acacagcagc cagtgagatc ctttcaaaac tcaaagcagc caggtgtggt ggctcacgcc tgtaatccca ccgctttggg aggctgagtc agatcacctg aggttaggaa 3120 3180 tttgggacca gcctggccaa catggcgaca ccccagtctc tactaataac acaaaaaatt 3240 agccaggtgt gctggtgcat gtctgtaatc ccagctactc aggaggctga ggcatgagaa ttgctcacga ggcggaggtt gtagtgagct gagatcgtgg cactgtactc cagcctggcg 3300 acagagggag aacccatgtc aaaaacaaaa aaagacacca ccaaaggtca aagcatatca 3360 3420 ttcctcaccc tcaagccctt agtggctcca tttcactcag taagagccac ggtccttatg gtgtccgttt ttcagctctg accttagctg ctgctctctg caccaccctg ctgttcttgt 3480 gagtttttga gcacaccggg acatccccac tccctggaac cttcttcccc cacacttggc 3540 3600 ttetteettt gagtetetae teeacteggg caageettee tagaceteet gatttaaaae tgtgactctc ccccaacctc cttggtgttt ctccgtagac gaacatcacc atctgatgta 3660 3720 tgtcagcctt tcccttcccc tgttagaagg gggacagcag gtagtaaaag tgaaatgtgc tgtaagcttt atgagggcag aggatttgtt tctcgtgttc actgttgtat cgccagggcc 3780 tcaaacacag cctgccacat agtaggagtc aacatatatt gatcactaaa tgtagatacc 3840 acctgtgttc ccatgttcat ataaattcta gaagagtctc ttcagtaaca aggtgaaccc 3900 cttccagagg gctgagtagg tacctcaggc cggggccaga gtgctgtgaa gacagcagca 3960 gcccagacca agettetetg tgtteegtgt cetggtetag aaccagegat gttetttetg 4020

```
accagtgett tttggaaggt ggetgaggte tgggeteagg tetgggeeat actagaaget
                                                                    4080
gggatccctt ctatagagca cttggtatgg cttgtatggt cttggggcaa gccagaccca
                                                                    4140
agccctctta tcccatttta gaaagggctt caatttggat ccagccccag gtctgcctta
                                                                    4200
gctctgtatt cttggggtat tttgttctgt attggcctat cttgactaac aatgagcctt
                                                                    4260
ggatttgaaa catatcatca gaaacctcag aagacaacat tettaaactg getagageet
                                                                    4320
ggtctgaatg gatgaaaagg agagactttt gaagcaatat gtaaaagatt gagaaatgat
                                                                    4380
ttgttggaaa tttctcaatt ggagaaattt ctttgatttg ttggaaattt ctttgattct
                                                                    4440
ttctcaatca aagaaaatcg ggacaaactc aacaatagaa agggaggaag caagatactc
                                                                    4500
agaaataaaa tgcattcccc tgtttcaact taatgcttca attcaggatt ctaaggaatc
                                                                    4560
cttgccagga atgtcagact caccttgata gttggagtta ctccattggt gactcgatca
                                                                    4620
                                                                    4680
aatacaggag ttgaggcacc tgcactgtaa aatactgatt agtctgatca ttaggaatat
cctgtatgcc aggtagaaga tacattgaac agattgcatg taggcattaa attcattttg
                                                                    4740
                                                                    4800
gggtattaca tatagacaac acatttcatt aagaaacata aaactgtcag atcggtggaa
tacttaaaag cacttggagg tgtttagcct aaaaagctta gttgagggga atggaagaaa
                                                                    4860
agatctggga gggtggttcc aaagaaggga tcagactatc ctaaagccct caggaatctg
                                                                    4920
ggctgggacc acctacttaa agataggatg ggcagctggg tgtggttggct cacgcctgta
                                                                    4980
ateceageae ttegggagge egaageggge ggateacetg aggteaggag ttegaggeea
                                                                    5040
gcctgaccaa catggagaaa cgctgtctct actaaaaata caaaattagc tgggtgtagt
                                                                    5100
ggcgcatgcc tgtaatccca gctactcggg aggctgaggc aggggaatcg cttgaacctg
                                                                    5160
ggaggtggag ggtgccgtga gccacgatcg cgccattgca ctccagcctg ggcaacaaga
                                                                    5220
gcgaaactct caaaaaacaa aaaaaaggat gggttccata tgggtggtgt caagtgccca
                                                                    5280
cctcctagca agtcagcagg ggccagaggc ccttgtaagt ggtgtctcgg ggggatcaac
                                                                    5340
5400
cacaaatgct aaagagctgt cttccaaggg agtgaaaatc tgggatgcca atggatcccg
                                                                    5460
agactttttg gacagcctgg gattctccac cagagaagaa ggggacttgg gcccagttta
                                                                    5520
tggcttccag tggaggcatt ttggggcaga atacagagat atggaatcag gtgaggagat
                                                                    5580
agaacaatgc cttccatttc cgggtgccct tcctagcacg tgtttgctcc gttgttttag
                                                                    5640
ataaggtetg ggggatgagt caatgteaca ggagetgatg tatagetttg acettgtgag
                                                                    5700
                                                                    5760
gggtggtgcc aggttgaagc cacaattaac gcctactgaa ggccgtttca catctttttt
tttttttttt ttttaattat tatactttaa gttttagggt acatgtgcac aatgtgcagg
                                                                    5820
ttagttacat atgtatacat gtgccatgct ggtgcgctgc accactaact caccatctag
                                                                    5880
catcaggtat atctcccaat gctatccctc cccctcctc ccaccccaca acatccccag
                                                                    5940
agtgtgatgt teceetteet gtgteeatat gttetegttg ttegatteee aetatgagtg
                                                                    6000
                                                                    6060
agaatatgcg gtgtttggtt ttttgttctt gcgatagttt actgagaatg atgatttcca
tttcaccacg tccctacaga ggacatgaac tcatcatttt ttatggctgc atagtattcc
                                                                    6120
atggtgtata tgtgccacat tttcttaatc cagtctatca tgttggacat ttgggttggt
                                                                    6180
tccaagtett tgeetattgt gaatagtgee acaataaaca tacgtgtgea tgtgtettta
                                                                    6240
tagcagcatg atttaatagt cctttgggta tatacccagt aatgggatgg ctgggtcaaa
                                                                    6300
tggtatttct agttctagat ccccgaggaa tcgccacact gacttccaca atggttgaac
                                                                    6360
                                                                    6420
tagtttacag teccaecaac agtgteaaag tgteetattt etecaeatee tetecageae
ctgttgtttc ctgacttttt aatgattgcc attctaactg gtgtgagatg gtatctcatt
                                                                    6480
gtggttttga tttgcgtttc tctgatggcc agtgatggtg agcatttttt catgtgtttt
                                                                    6540
ttggctgcat aaatgtcttc ttttgagaag tgtctgttca tgtccttcgc ccactttttg
                                                                    6600
atggggttgt ttttttctta taaatttgtt tgagttcatt gtagattctg gatattagcc
                                                                    6660
ctttgtcaga tgagtaggtt gcaaaaatgt tctcccattt tgtgggttgc ctgttcactc
                                                                    6720
tgatggtagt ttcttttgct gtgcagaagc tctttagttt aattagatcc catttgtcaa
                                                                    6780
ttttggcttt tgttgccatt gcttttggca taggcatgaa gtccttgccc atgcctatgt
                                                                    6840
cctgaatggt aatgcctagg ttttcttcta gggtttttat ggttttaggt ctaacgttta
                                                                    6900
```

agtetttaat eeatettgaa ttgatttttg tataaggtgt aaggaaggga teeagtttea 6960 gctttttaca tatggctagc cagttttccc agcaccattt attacatagg gaatcctttc 7020 cccattgctt gtttttctca ggtttgtcaa agatcagata gttgtagata tgcggcgtta 7080 tttctgaggg ctctgttctg ttccattgat ctatgtgtct gttttggtac cagtaccata 7140 ctgttttggt tactgtagcc ttgtagtata gtttgaagtc aggtagcgtg atgcctccag 7200 ctttgttctt ttggcttagg attgacttgg cgatgcgggc tctttttttgg ttccatatga 7260 actttaaagt agttttttcc aattctgtga agaaagtcat tggtagcttg atggggatgg 7320 cattgaatct ataaattacc ttgggcagta tggccatttt cacgatattg attcttccta 7380 cccatgagca tggaatggtc ttccatttct ttgtatcctc ttttatttca ttgagcagtg 7440 gtttgtagtt ctccttgaag aggtccttca catccctttt aaggtggatt cctaggtatt 7500 ttattctctt tgaagcaatt gtgagtggaa gttcactcat gatttggctc tctgtttgtc 7560 tgttattggt gtataagaat gcttgtgatt tttgcagatt gattttatat cctgagactt 7620 tgctgaagct gcttatcagc ttaaggagat tttgggctga gacaatgggg ttttctagat 7680 atacaatcat gtcgtctgca aacagggaca atttgacttc ctcttttcct aattgaatac 7740 cctttatttc cttctcctgc ctaattgccc tggccagaac ttccaacact atgttgaata 7800 ggagtggtga gagagggcat ccctgtcttg tgccagtttt caaagggaat gcttccagtt 7860 tttgcccatt cactatgata ttggctgtgg ctttgtcata gatagctctt attattttga 7920 aatatgttcc atcaatacct aatttattga gagtttttag catgatgtgt tgttgaattt 7980 tgtcaaaggc tttttctgca tctattgaga taatcatgtg gtttttgtct ttggatctgt 8040 ttatatgctg gattacattt attgatttgc gtatattgaa ccagccttgc atcctaggga 8100 tgaagcccac atgatcatgg tggataagct ttttgatgtg ctgctggatt cggtttgcca 8160 gtattttatt gaggattttt gcatcaatgt tcatcaagga tattggtcta aaattctctt 8220 ttttggtgtg tctctgccca gctttggtat caggatgatg ttggcttcat aaaatgagtt 8280 agggaggatt ccctcttttt ctattgattg gaatagtttc agaaggaatg gtaccagttc 8340 ctctttgtac ctctggagaa ttcggctgtg aatccatctg gtcctggact ctctttggtt 8400 ggtaagctat tgattattgc cacaatttca gctcctgtta ttggtctatt cagagattca 8460 acttetteet ggtttagtet tgggagagtg tatgtgteaa ggaatttate catttettet 8520 agattttcta gtttatttgc gtagaggtgt ttgtagtaat ctctgatggt agtttgtatt 8580 tctgtgggat cggtggtgat atccccttta tcatttttta ttgcgtctat ttgattcttc 8640 tetttttett tattagtett getageggte tataaatttt gttgateett teaaaaaace 8700 agctcctgga ttcattaatt ttttgaaggg ttttttgtgt ctctatttcc ttcagttctg 8760 ctctgatttt agttatttct tgccttctgc tagcttttga atatgtttgc tcttgctttt 8820 ctagttettt taattgtgat gttagggtgt caattttgga tettteetge tttetettgt 8880 gggcatttag tgctataaat ttccctctac acactgcttt gaatgtgtcc cagaggttct 8940 ggtatgttgt gtctttgttc ttgttggttt caaagaacat ctttatttct gccttcattt 9000 cgttatgtac ccagtagtca ttcaggagca ggttgttcag tttccatgta gttgagcagt 9060 tttgagtgag attettaate etgagtteta gtttgattge aetgtggtet gagagatagt 9120 ttgttataat ttctgttctt ttacatttgc tgaggagagc tttacttcca actatgtggt 9180 cggttttgga ataggtgtgg tgtggtgctg aaaaaaatgt atattctgtt gatttgggat 9240 ggagttetgt agatgtetat taggtetget tggtgeagag etgagtteaa tteetgggta 9300 teettgttga etttetgtet egttgatetg tgtaetgttg acagtgggtg ttaaagtete 9360 ccattattaa tgtgtggagt ctaagtctct ttgtaggtca ctcagatgat tggcacttac 9420 tgggcgcttg gcactttcca tactgtgtca tcggcagata gctgcatggt tggtgttcgt 9480 gctggggaat gggaagttca tcggtgggac aaggacaaaa tgcccccatt gctttgttgt 9540 ggetttaate teeetttega ggetgageea cagegtgetg taggtggege tgetgtgaag 9600 cgcagtacca gggtcacact ccactcccag ctctgcagag gtggagaaag aatgaaacat 9660 ctcactcctg gacttccact ttcctgtcac tgttggtgtc acctcttact ggatgtcaca 9720

gagcccagcc	cctcccacct	gtgcctagga	aaagcagatg	ccaccttgga	atgtggggtt	9780
tgtgtgtgca	atttactagc	tgggcagaga	ccagcaacct	ggagagcagg	tgtctcgtct	9840
aaggggacag	tcacatttca	cctccagcca	cctggaggaa	tttgggcctg	gtgatgtcag	9900
aattcttcaa	taaaagccta	aaatctatat	tttatgtgcg	gtcatgagat	ctgttaaatg	9960
ttagcaactt	caggaagttt	aaaaatgctg	tgtggaccta	gaataggcaa	gttcttaaag	10020
gcagaaagtg	gaatgctagt	ttccagggac	tggggaacag	ggaggaatgg	ggagttcatg	10080
	acagaggttt					10140
	tgatggtgat					10200
	gtgatggtga					10260
	gtgatggaga					10320
	gtgatggtga					10380
	gttgcctaac					10440
	aatattatgt					10500
	aggtaatgtt					10560
	gccagtcccc					10620
	cttaaaaggc					10680
	gattttagta					10740
	attttttt					10800
	acccagtttc					10860
	ttcctcagag					10920
	attttagcac					10980
acactaccaa	ggttcatctt	tttaaaatct	ttgatgttac	cttttttgga	acagtgacca	11040
tgagaggact	ttcctcccaa	aattttgaaa	actactgaac	cagaatatag	tctgacacta	11100
ataggtagaa	atttaaccaa	aggagattat	gaagctctgc	acttgagtta	acaaaatcac	11160
ttctcagctt	ccagttccat	ctcagaagga	aggaaaaggg	attaaaaatc	cagagaccag	11220
aaaatgggag	caaagtacaa	ggtggtgtaa	tcattacaga	ggtttcctga	tgtttccaag	11280
tcagtcgtgt	gttgagctgc	taaactctaa	agtaatttta	ggtggaatgt	tggaaacatg	11340
ctgctgaggt	gatagaaagg	aatccatggt	cctctgttag	ttggaaagta	tatggaatac	11400
tatattctac	ataagataca	atactctctg	tgagacaagg	ataaagtaga	ttttgtcagt	11460
gaaattgtga	caagaatcgc	tgatgggttt	agagcctaag	tttgcgagga	gcactggaag	11520
aaattaagat	tgttgagatt	ggaaagggtt	agctatgggg	gaacaggagg	aggtgactcc	11580
atgacagacc	aaatattcaa	aggactgtgt	agaagaggaa	aaagactttg	ttagggctcc	11640
agaggacaga	gccaggagtc	agacagggcc	ttgaactcaa	cccaccgaga	tctgcaaact	11700
ttgcaggatg	caccagatgt	cttgtagcca	tgggtcaagg	ggggaccctg	ggtaagagac	11760
tgtaatagat	gacctctaag	gccatctcat	gacatgtgtg	attaatgtat	gtacctgtcc	11820
tctctttttg	acaattctac	agattattca	ggacagggag	ttgaccaact	gcaaagagtg	11880
attgacacca	tcaaaaccaa	ccctgacgac	agaagaatca	tcatgtgcgc	ttggaatcca	11940
agaggttgaa	agaaccccgt	cgtcttcatt	tatactaacc	atactcttag	agggaagcaa	12000
tctggttttg	tgcagaggca	ctgagggagg	caggaccctg	ggcaacttcc	cccagccaca	12060
tggttgtgtg	acgttgggca	agtcacattt	tgctgcactt	tcaccttcag	atcatgaggt	12120
tgggcccaga	ggatttttt	tttttttt	ttttttgaga	cagagttttg	ctctgttgcc	12180
caggctggaa	tgcaacggcg	tgatcttggc	tcactgtaac	ctctgcctcc	tgggttcgag	12240
	gcctcagcct					12300
	tttttagtag					12360
	gatctgcctt					12420
	tacacaaaaa					12480
	agcagatgaa					12540
atattgtaaa	attcaactct	accagggtgt	agagccaggt	gtggtggctc	acacctgtaa	12600

ttccaacaac tccagaggcc aaggcgagag gatcatttga acccacggaa tttgaggctg 12660 12720 tagtgagtca tgatcacgcc attgcactcc atcctgggca acagagtgag accctgaata tttaaaaaca acaacaacaa caaaactcta tcaggatatc ataagtactt agagtgaaat 12780 acttgcatct gtaatagaga cttattttt ttttttttga gacacagtct caccctgttg 12840 12900 cccaggetgg agtgcagtgg tttgatetec getcaeggca acetecatet cccaggttca 12960 aqtqaqttcc cattcctcag ccccagagct gggaccacag gcgcgcgaat ttttgtattt ttagcagaga cggggtttca ctatgttggc caggctagtc tcaaactcaa gttggcctca 13020 13080 agtgatctgc ccaccctggc gtcccagtgt tgggatttca ggcatgagcc actgtgcctg gccatgtaat agagactttt aatataggag ggtgtaccag aagcaccagt ttcctgtggc 13140 13200 aaacagaatt attcctgctg tatttgtaat ttggtgccac gaggtagccc agatcccttc 13260 agctctgatg gaagagcatt gcttcagccg taaatggaca cctgcagaaa ccttgcaccg 13320 atggatagtc teceteaget eegtgecate getgeagggg etgttatgga cateactgea 13380 gcccagtggc tetetetect ggtetecace atatgagttg gettetgttt eteteetgtt ttactttgcc tttagctgtg gtctttcaaa ccaccatccc tccttatctt cctctgctgg 13440 13500 ttcctcagat cttcctctga tggcgctgcc tccatgccat gccctctgcc agttctatgt 13560 ggtgaacagt gagetgteet geeagetgta ceagagateg ggagacatgg geeteggtgt 13620 gcctttcaac atcgccagct acgccctgct cacgtacatg attgcgcaca tcacgggcct 13680 gaaggtgggc tgtctcggga agggtgactt gccagcctac cacatgagct cttcagttct ttaatatggg aaaacaaatt gcagagttta gtctctgatt agcttttaaa tttgatatgt 13740 13800 gtaagtaaga catgaaccag cttttacttt gaaaccttcc ttttctggaa ggttttctgg 13860 ccctgtggta tatgcactaa cagatctata caggttgttt gtgatacagc ttctatggat 13920 cttctcaaaa gctatgctga ggttgggtat ggtggctcat gcctgtaatc ccagcacttt 13980 ggaagactga gacaggagca attgcttgag gtctggagtt caataccagc ctgggcaaca taacaagatg ctgttgctac aaaaaaatgg aaaagctaca ctaaattatt tttttaaaaa 14040 14100 aagccttgcg gtgtctgcat attctaatgt ttttaaatga tgttttaaag aattgaaact 14160 aacatactgt tctgctttct cccggtttat agccaggtga ctttatacac actttgggag atgcacatat ttacctgaat cacatcgagc cactgaaaat tcaggtaaga attagatgtt 14220 14280 atacttttgg gtttggtacc ttctcttgat aaaaggttga ctgtggaaca ggtatctgct caatgctgtg tccaagataa agatgactgc tccaaatgtg gggcttcagt ttagggagaa 14340 14400 qtqqtqqqca gqtqqqcagg acaaggcagg catctgcctc agcaaccatg gcacttaact 14460 tgtcaggtgc tgtgaggtac taagcaccag taccagagag ggaagagcca cattcaagcc 14520 aggggattgt ccaaaaggag gcattttaac tcattttaac ttgaaggaga attgaagtgc 14580 aaatgttttt ccttttcttt ttttttgaga tggagtcttt ctctgtcggc caggctggag 14640 tgtgccgtgg tgcgatctca gctcactgca acctccacct cccgggttca agcaattctt 14700 ctgcctcagc ctcccaggta gctgggatta caggcacatg ccaccacacc cagctaattt tttgtattat tagtagagat ggggtttcgt catgttggcc aggctgatct caaactcctg 14760 14820 acttcaagtg taccacctgc ctcagcctcc gaaagttctg gaattacagg cataagccac caccetggce ataaatattt tttgttaatt ttacattaag tacaatattt aggteeaaac 14880 ttcaaaagtc tgttgaaatc cctgaagtta tagcagccaa caattgatat gaaatggcaa 14940 15000 taaaaatgta agttcatctg cttcatgagc cttaaggaaa aaaactcaga accagacact ttttagcccc ttccaggtta gatccaggtt ttaaaagtta ttcctttgag ggagtttggc 15060 15120 tgcttttgag tggaggtgac ttcaggctta ttctctctgg ctctctgctc tggtcatttt 15180 tagacatagt aataggttgt gacctgtctt cacatcctaa ttgccactgt ctgttcatcc 15240 caggaatect ggettteate cetttetgtt caetgteeat geatgteate ttteettett 15300 tctgccaggg accagatggg ttagggattg tgaattcaag taaacgtaga gctactatga gttacagatt gactgtgttc ctgtctttaa taaatttgcc aagagtggtt ataagaactt 15360 acacctgatg aggcaccagg ctcctgatgc tgtgtaatgt cacaaaatac ccctcactct 15420

```
cgatctgtgc aagagaacag ctggttgcgc tccaatcatg ttacataacc tacgcgaagg
                                                                   15480
 tatcgacagg atcatactcc tgtaaaatag aactttgttg atcacatcct gtgtacttgt
                                                                   15540
 ttcacggaca tgaggagcaa ttacaacagg tcgtacaatt atggcaaaat aatggcctta
                                                                   15600
 ttttgttttt agcttcagcg agaacccaga cctttcccaa agctcaggat tcttcgaaaa
                                                                   15660
 gttgagaaaa ttgatgactt caaagctgaa gactttcaga ttgaagggta caatccgcat
                                                                   15720
 ccaactatta aaatggaaat ggctgtttag ggtgctttca aaggagctcg aaggatattg
                                                                   15780
 tcagtcttta ggggttgggc tggatgccga ggtaaaagtt ctttttgctc taaaagaaaa
                                                                   15840
 aggaactagg tcaaaaatct gtccgtgacc tatcagttat taatttttaa ggatgttgcc
                                                                   15900
 actggcaaat gtaactgtgc cagttctttc cataataaaa ggctttgagt taactcactg
                                                                   15960
 agggtatctg acaatgctga ggttatgaac aaagtgagga gaatgaaatg tatgtgctct
                                                                   16020
 tagcaaaaac atgtatgtgc atttcaatcc cacgtactta taaagaaggt tggtgaattt
                                                                   16080
 cacaagctat ttttggaata tttttagaat attttaagaa tttcacaagc tattccctca
                                                                   16140
 aatctgaggg agctgagtaa caccatcgat catgatgtag agtgtggtta tgaactttaa
                                                                   16200
 agttatagtt gttttatatg ttgctataat aaagaagtgt tctgcattcg tccacgcttt
                                                                   16260
 gttcattctg tactgccact tatctgctca gttccttcct aaaatagatt aaagaactct
                                                                   16320
 ccttaagtaa acatgtgctg tattctggtt tggatgctac ttaaaagagt atattttaga
                                                                   16380
 aataatagtg aatatatttt gccctatttt tctcatttta actgcatctt atcctcaaaa
                                                                   16440
 tataatgacc atttaggata gagttttttt ttttttttt taaactttta taaccttaaa
                                                                   16500
gggttatttt aaaataatct atggactacc attttgccct cattagcttc agcatggtgt
                                                                   16560
gacttctcta ataatatgct tagattaagc aaggaaaaga tgcaaaacca cttcggggtt
                                                                   16620
aatcagtgaa atattttcc cttcgttgca taccagatac ccccggtgtt gcacgactat
                                                                   16680
ttttattctg ctaatttatg acaagtgtta aacagaacaa ggaattattc caacaagtta
                                                                   16740
tgcaacatgt tgcttatttt caaattacag tttaatgtct aggtgccagc ccttgatata
                                                                   16800
gctatttttg taagaacatc ctcctggact ttgggttagt taaatctaaa cttatttaag
                                                                   16860
gattaagtag gataacgtgc attgatttgc taaaagaatc aagtaataat tacttagctg
                                                                   16920
attcctgagg gtggtatgac ttctagctga actcatcttg atcggtagga ttttttaaat
                                                                   16980
ccatttttgt aaaactattt ccaagaaatt ttaagccctt tcacttcaga aagaaaaaag
                                                                   17040
ttgttggggc tgagcactta attttcttga gcaggaagga gtttcttcca aacttcacca
                                                                   17100
tetggagaet ggtgtttett tacagattee teetteattt etgttgagta geegggatee
                                                                   17160
tatcaaagac caaaaaatg agtcctgtta acaaccacct ggaacaaaaa cagattttat
                                                                   17220
gcatttatgc tgctccaaga aatgctttta cgtctaagcc agaggcaatt aattaatttt
                                                                   17280
17340
ggctcactgc aacctccacc tcccaggttc aagtgattct cctgcctcag cctcccatgt
                                                                   17400
agctgggatc acaggcacct gccaccatgc ccggctaatt ttttgtattt tttgtagaga
                                                                   17460
cagggtttca ccatgttggc caggctggtc tcaaacacct gacctcaaat gatccacctg
                                                                   17520
cctcagcctc ccaaagtgtt gggattacag gcgtaagcca ccatgcccag ccctgaatta
                                                                   17580
atatttttaa aataagtttg gagactgttg gaaataatag ggcagaggaa catattttac
                                                                   17640
tggctacttg ccagagttag ttaactcatc aaactctttg ataatagttt gacctctgtt
                                                                  17700
ggtgaaaatg agccatgatc tcttgaacat gatcagaata aatgccccag ccacacaatt
                                                                  17760
gtagtccaaa ctttttaggt cactaacttg ctagatggtg ccaggttttt ttgcacaagg
                                                                  17820
agtgcaaatg ttaagatctc cactagtgag gaaaggctag tattacagaa gccttgtcag
                                                                  17880
aggcaattga acctccaagc cctggccctc aggcctgagg attttgatac agacaaactg
                                                                  17940
aagaaccgtt tgttagtgga tattgcaaac aaacaggagt caaagcttgg tgctccacag
                                                                  18000
tctagttcac gagacaggcg tggcagtggc tggcagcatc tcttctcaca ggggccctca
                                                                  18060
ggcacagett acettgggag geatgtagga agecegetgg ateateaegg gataettgaa
                                                                  18120
atgctcatgc aggtggtcaa catactcaca caccctagga ggagggaatc agatcggggc
                                                                  18180
aatgatgcct gaagtcagat tattcacgtg gtgctaactt aaagcagaag gagcgagtac
                                                                  18240
cactcaattg acagtgttgg ccaaggctta gctgtgttac catgcgtttc taggcaagtc
                                                                  18300
```

cctaaacctc tgtgcctcag gt	ccttttct	tctaaaatat	agcaatgtga	ggtggggact	18360
ttgatgacat gaacacacga ag					18420
caattcagac tctgtaaata tc	cagaatta	tttgggttcc	tctggtcaaa	agtcagatga	18480
atagattaaa atcaccacat tt					18540
atggctgcag cagctgccag gg	gcttgggg	tttttttggc	aggtagggtt	gggagg	18596
<210> 349 <211> 3493 <212> DNA <213> Homo sapiens					
<400> 349 agcggccggg gccacgatgg ag	cgcgacgg	ctgcgcgggg	ggcgggagcc	gcggcggcga	60
gggcgggcgc gctccccggg ag	ggcccggc	ggggaacggc	cgcgatcggg	gccgcagcca	120
cgctgccgag gcgcccgggg ac	ccgcaggc	ggccgcgtcc	ttgctggccc	ctatggacgt	180
gggggaggag ccgctggaga ag	geggegeg	cgcccgcact	gccaaggacc	ccaacaccta	240
taaagtactc tcgctggtat tg	tcagtatg	tgtgttaaca	acaatacttg	gttgtatatt	300
tgggttgaaa ccaagctgtg cc	aaagaagt	taaaagttgc	aaaggtcgct	gtttcgagag	360
aacatttggg aactgtcgct gt	gatgctgc	ctgtgttgag	cttggaaact	gctgtttaga	420
ttaccaggag acgtgcatag aa	ccagaaca	tatatggact	tgcaacaaat	tcaggtgtgg	480
tgagaaaagg ttgaccagaa gc	ctctgtgc	ctgttcagat	gactgcaagg	acaagggcga	540
ctgctgcatc aactacagtt ct	gtgtgtca	aggtgagaaa	agttgggtag	aagaaccatg	600
tgagagcatt aatgagccac ag	tgcccagc	agggtttgaa	acgcctccta	ccctcttatt	660
ttctttggat ggattcaggg ca	gaatattt	acacacttgg	ggtggacttc	ttcctgttat	720
tagcaaacta aaaaaatgtg ga	acatatac	taaaaacatg	agaccggtat	atccaacaaa	780
aactttcccc aatcactaca gc	attgtcac	cggattgtat	ccagaatctc	atggcataat	840
cgacaataaa atgtatgatc cc	aaaatgaa	tgcttccttt	tcacttaaaa	gtaaagagaa	900
atttaatcct gagtggtaca aa	ıggagaacc	aatttgggtc	acagctaagt	atcaaggcct	960
caagtctggc acatttttct gg	ccaggatc	agatgtggaa	attaacggaa	ttttcccaga	1020
catctataaa atgtataatg gt	tcagtacc	atttgaagaa	aggattttag	ctgttcttca	1080
gtggctacag cttcctaaag at	gaaagacc	acacttttac	actctgtatt	tagaagaacc	1140
agattettea ggteatteat at	ggaccagt	cagcagtgaa	gtcatcaaag	ccttgcagag	1200
ggttgatggt atggttggta tg	ctgatgga	tggtctgaaa	gagctgaact	tgcacagatg	1260
cctgaacctc atccttattt ca	gatcatgg	catggaacaa	ggcagttgta	agaaatacat	1320
atatctgaat aaatatttgg gg	gatgttaa	aaatattaaa	gttatctatg	gacctgcagc	1380
tcgattgaga ccctctgatg tc	ccagataa	atactattca	tttaactatg	aaggcattgc	1440
ccgaaatctt tcttgccggg aa	ccaaacca	gcacttcaaa	ccttacctga	aacatttctt	1500
acctaagcgt ttgcactttg ct	aagagtga	tagaattgag	cccttgacat	tctatttgga	1560
ccctcagtgg caacttgcat tg	aatccctc	agaaaggaaa	tattgtggaa	gtggatttca	1620
tggctctgac aatgtatttt ca	aatatgca	agccctcttt	gttggctatg	gacctggatt	1680
caagcatggc attgaggctg ac	acctttga	aaacattgaa	gtctataact	taatgtgtga	1740
tttactgaat ttgacaccgg ct	cctaataa	cggaactcat	ggaagtctta	accaccttct	1800
aaagaatcct gtttatacgc ca	aagcatcc	caaagaagtg	caccccctgg	tacagtgccc	1860
cttcacaaga aaccccagag at	aaccttgg	ctgctcatgt	aacccttcga	ttttgccgat	1920
tgaggatttt caaacacagt to					1980
aactttaccc tatggaagac ct					2040
ccagcaccag tttatgagtg ga	tacagcca	agacatctta	atgccccttt	ggacatccta	2100
taccgtggac agaaatgaca gt					2160
ctttagaatt cctcttagtc ct	gtccataa	atgttcattt	tataaaaata	acaccaaagt	2220
gagttacggg ttcctctccc ca					2280
agctttgctt actacaaata ta	gtgccaat	gtaccagagt	tttcaagtta	tatggcgcta	2340

```
ctttcatgac accctactgc gaaagtatgc tgaagaaaga aatggtgtca atgtcgtcag
                                                                      2400
tggtcctgtg tttgactttg attatgatgg acgttgtgat tccttagaga atctgaggca
                                                                      2460
aaaaagaaga gtcatccgta accaagaaat tttgattcca actcacttct ttattgtgct
                                                                      2520
aacaagetgt aaagatacat etcagaegee tttgeaetgt gaaaacetag acacettage
                                                                      2580
tttcattttg cctcacagga ctgataacag cgagagctgt gtgcatggga agcatgactc
                                                                      2640
ctcatgggtt gaagaattgt taatgttaca cagagcacgg atcacagatg ttgagcacat
                                                                      2700
cactggactc agcttctatc aacaaagaaa agagccagtt tcagacattt taaagttgaa
                                                                      2760
aacacatttg ccaaccttta gccaagaaga ctgatatgtt ttttatcccc aaacaccatg
                                                                      2820
aatctttttg agagaacctt atattttata tagtcctcta gctacactat tgcattgttc
                                                                      2880
agaaactgtc gaccagagtt agaacggagc cctcggtgat gcggacatct cagggaaact
                                                                      2940
tgcgtactca gcacagcagt ggagagtgtt cctgttgaat cttgcacata tttgaatgtg
                                                                      3000
                                                                      3060
taagcattgt atacattgat caagttcggg ggaataaaga cagaccacac ctaaaactgc
                                                                      3120
ctttctgctt ctcttaaagg agaagtagct gtgaacattg tctggatacc agatatttga
atctttctta ctattggtaa taaaccttga tggcattggg caaacagtag acttatagta
                                                                      3180
gggttggggt agcccatgtt atgtgactat ctttatgaga attttaaagt ggttctggat
                                                                      3240
atcttttaac ttggagtttc atttcttttc attgtaatca aaaaaaaat taacagaagc
                                                                      3300
caaaatactt ctgagacctt gtttcaatct ttgctgtata tcccctcaaa atccaagtta
                                                                      3360
ttaatcttat gtgttttctt tttaattttt tgattggatt tctttagatt taatggttca
                                                                      3420
aatgagttca actttgaggg acgatctttg aatatactta cctattataa aatcttactt
                                                                      3480
tgtatttgta ttt
                                                                      3493
       350
836
DNA
Homo sapiens
^{<\!400>} ^{350} gtgaaacacc ctcggctggg aagtcagttc gttctctcct ctcctctt cttgtttgaa
                                                                        60
catggtgcgg actaaagcag acagtgttcc aggcacttac agaaaagtgg tggctgctcg
                                                                       120
agcccccaga aaggtgcttg gttcttccac ctctgccact aattcgacat cagtttcatc
                                                                       180
gaggaaagct gaaaataaat atgcaggagg gaaccccgtt tgcgtgcgcc caactcccaa
                                                                       240
gtggcaaaaa ggaattggag aattctttag gttgtcccct aaagattctg aaaaagagaa
                                                                       300
tcagattcct gaagaggcag gaagcagtgg cttaggaaaa gcaaagagaa aagcatgtcc
                                                                       360
tttgcaacct gatcacacaa atgatgaaaa agaatagaac tttctcattc atctttgaat
                                                                       420
aacgtctcct tgtttaccct ggtattctag aatgtaaatt tacataaatg tgtttgttcc
                                                                       480
aattagcttt gttgaacagg catttaatta aaaaatttag gtttaaattt agatgttcaa
                                                                       540
aagtagttgt gaaatttgag aatttgtaag actaattatg gtaacttagc ttagtattca
                                                                       600
atataatgca ttgtttggtt tcttttacca aattaagtgt ctagttcttg ctaaaatcaa
                                                                       660
gtcattgcat tgtgttctaa ttacaagtat gttgtatttg agatttgctt agattgttgt
                                                                       720
actgctgcca tttttattgg tgtttgatta ttggaatggt gccatattgt cactccttct
                                                                       780
acttgcttta aaaagcagag ttagattttt gcacattaaa aaattcagta ttaatt
                                                                       836
       351
5404
DNA
Homo sapiens
^{<400>} 351 cctgtgttac atctggaagc aagcagtgct gctgacggtg tgagtgctgc atgggaggag
                                                                        60
gtggctggcc accacgcaga ccgtggcccg cagggatcgg atgccaatgg tgatggtgac
                                                                       120
cagggccatg agaatgccgc attgccagac ccgcaggagt cggacccagc agacatgaac
                                                                       180
                                                                       240
gctctcgctc tgggtccctc agaatatgac tctctgcctg aaaatagcga gacaggagga
aatgagtete aaccagacag ccaggaagac ceeegagaag taettaaaaa aacattggaa
                                                                       300
ttctgcttat ctagggagaa ccttgctagt gacatgtatc ttatatcaca gatggatagt
                                                                       360
```

gaccagtatg	tgccaatcac	aacggtggct	aacctcgacc	acatcaagaa	gctcagcact	420
gatgtggact	tgattgtgga	agtgctaaga	tctttacctt	tagtccaagt	ggatgaaaag	480
ggagaaaaag	taaggccaaa	tcaaaatcgc	tgcatagtaa	tattgcgtga	aatatctgaa	540
tctacccccg	tggaagaagt	agaagcacta	tttaaaggag	ataatttacc	aaaatttata	600
aactgtgaat	ttgcatataa	tgataattgg	tttattacat	ttgaaacaga	agctgatgca	660
caacaggctt	acaaatacct	tcgagaagaa	gtcaaaactt	ttcaaggaaa	accaattaag	720
gcacggataa	aagcaaaggc	aatagctata	aacacatttt	tgccaaagaa	tggatttaga	780
cccctggacg	tgagcctgta	tgcccagcag	cgctacgcga	cgtcgttcta	cttccctccc	840
atgtacagcc	cccagcagca	gttccccctg	tacagcctga	tcactcccca	gacgtggtca	900
gcaacgcaca	gctatcttga	cccacccttg	gtaactccat	ttccaaatac	tggatttata	960
aatgggttta	cgtctccagc	gttcaagcct	gcggcgtctc	ctctgacttc	tctcagacag	1020
tatcctcctc	gaagcaggaa	tcctagtaaa	tctcatctgc	ggcatgcgat	tcctagtgca	1080
gagaggggac	ctgggttatt	agaaagtcct	tcaatattta	acttcactgc	agatcgatta	1140
attaatggtg	tccggagtcc	acaaacaagg	caagcaggtc	aaactagaac	acggattcaa	1200
aacccttcag	catatgccaa	gagagaggct	gggcctgggc	gtgtggagcc	aggcagtctc	1260
gaatcctctc	ctggtttagg	gaggggaagg	aagaattcct	ttggctaccg	gaagaaaagg	1320
gaggagaagt	ttacaagcag	ccagacacag	tctccaacgc	caccaaagcc	tccgtcgcca	1380
agcttcgagc	tggggctgtc	cagcttccct	ccattacctg	gagctgccgg	caatttgaag	1440
acagaggact	tgtttgaaaa	caggctatct	agcttgataa	taggaccatc	caaagaaagg	1500
accctcagtg	cagacgcaag	cgtgaacacc	cttcctgtag	tggtctccag	agagccctcg	1560
gtgccggctt	cttgtgctgt	atcagcaacg	tacgagcgat	cccctcccc	agctcattta	1620
cccgatgatc	ccaaggtggc	ggagaaacag	agggaaaccc	acagtgtgga	cagacttcct	1680
tccgccctca	ctgcgaccgc	gtgtaaatcg	gtgcaggtga	acggagccgc	cacggaattg	1740
cgaaagccca	gctacgcaga	gatttgtcag	agaacgagta	aagagcctcc	ttcttcccca	1800
ttgcaacccc	aaaaagaaca	aaagccaaac	actgttggtt	gtgggaagga	ggaaaagaag	1860
	ccgcagagag					1920
	agaggcggcc					1980
	agcagagcac					2040
	gcgctgtgtt					2100
	aggagcttgc					2160
	attctccccc					2220
	taggttggtg					2280
	agcatttatc					2340
	ctatatatag					2400
_	aactggtctg					2460
	ttggcagagg					2520
	gatgtgggag					2580
	agagagcgca					2640
_	ccttggttct	=				2700
= '	ttatgtaata					2760
	ttgcccactg					2820
	atggccccgg					2880
	agagtccaca					2940
	tttaagagtt					3000
	tggaggataa					3060
	gaagtgctgc					3120
	aaatataaat					3180 3240
gcagcaaaca	ttaaaataag	adlatttcct	yctadatyta	accatacact	LLALLUCACA	3240

```
aaatgttatt taacaagact gagggttttt tttaagaaaa aattatttcc atccaatatt
                                                                     3300
taaagacttg aattttattt aaacttgaaa atgactttgc cttaactttt gtataagaca
                                                                     3360
gcttagagtc catggagccc ggccctgggt tggcgtgagt gggtcagagt tactcagtta
                                                                     3420
                                                                     3480
ctgcgtggat ctcctgtcgc tagttttact gagtaagcat actgtagtac aagagctagt
agtagttttt gtaatatacc ttaaagatct tcaacagttg atcttttttc agaatgttgg
                                                                     3540
                                                                     3600
aaaatcctgt aaatgcaaat agtcaatact gtattaaata cgtgcacttg gagtgtgctt
                                                                      3660
cgcttgtaca gttgtaaata atcagaacat atgaaaaagg taccctacag agaaaattct
                                                                      3720
gatacagatt attgatatat tataaatgtt gctgttgagc gggatgtaga taaactaaat
                                                                      3780
gttgtggttt gaatattatt ttgatttgtt gagattttct tttttctctt acatcggtgt
                                                                      3840
gttgaactga ttctgcctct ttgctgcaaa agggaattgg aaagtcttat taaaagcctc
cagatgtttt catactcttt taaaatgtat gtaaatgcat actaatcata tctaatgtga
                                                                      3900
                                                                      3960
aagagtttta aagtatatag agagcaaaaa ctggcaggat cgtaagtgaa ggtgactagt
                                                                      4020
aatctaattt aaatcacctg cagctaagca tgattgaccc tgccagagga aaacatgcct
                                                                      4080
atttgaccat ttcctttaaa gcagttgcca ttattcaaat acagagaaat agccacaggg
                                                                      4140
ctagtgtttt tcaaatgcat tttaaagaac atggggattt ttttttgtag ttgtcagttc
actgaccaaa aaaaaaaaaa aaatcagaaa taattgatct gtgaaaccca aactctcaat
                                                                      4200
                                                                      4260
actcagaaag ctgggaggca acctcgaggc ctgggcctac gagctgcatc ttcgctacgg
aagggccagg gcgccatcag ccattcccaa aacacaaggc ctgcccgtcc gccagtgagt
                                                                      4320
                                                                      4380
ccttggtttt taataatgag aagtcctttc ccccaaggtg tgagcattgc agcgcagtgt
                                                                      4440
gtgtgtgtgg ttagagccag cttagtcctt cactttgtcg accgaagtgg gagctcaaca
                                                                      4500
gctgcatgag gagggcagcg cgtgcattag ccagtcgcca ctggagggct ctgctgccct
ccggtcaata cactgtagtt actgcctagc cagcagcagt cttctgcatc aagaactgaa
                                                                      4560
                                                                      4620
accttgctcg gaggtgattt ttatagcatc ctttttaatt aaaggtgaaa tacagattgc
tatataatgt ctgaaaaaac ctgatactac ttcaagagtt tctgctcaga agaaaatgag
                                                                      4680
                                                                      4740
agttatcata ataggaagct gtggcggtcc atgccaactg tgctgtgtca catacagcga
                                                                      4800
tgagagtggc tttcatactt tttttttttt taagttaaca ccctccttta cccccagcag
tatctcaggt tatagaatca gagatgcagc agtgacaaat ggcattttaa cttgtaaaat
                                                                      4860
                                                                      4920
cgtgtgatga tgcttatcat tttgaaatag aagaataaaa acctggtccc gtttcaccag
acatgaattt caagtggagt cgtcgttctc tgagagtgag tgtcttgaca ttttcaccca
                                                                      4980
                                                                      5040
ggccctcctg tcatcacatc accggctgtc actggcgggt ggccgtaaac gtcctgcgtt
                                                                      5100
gctatattag gatctctgca gttcaggctt caaaaccagt tcagtgtatc cgggcgacgg
                                                                      5160
gtagtggtgg tgcatgcctg tctgtgtgcc ccgctggcga gctgtagttg cggcttgcgt
                                                                      5220
gcctcgcggc ccactacagg gctgcagaca atcgaggcga gggcgctggc cgccagcagc
                                                                      5280
tcacagegeg ggggtcatgt ggtegeteet egagggttte gtttttgtte tgettcatta
agactggaat caagcttaca tgtaaactat tggtaattta agtttccttt tgtgtcattc
                                                                      5340
agtgtaaaac tgtctaattt gaaaaaaaat gtaggttatg aaaataaaga tttaggcact
                                                                      5400
                                                                      5404
gttc
       352
4121
DNA
Homo sapiens
<400> 352
acaatgtggt cccgaagcgg ccagcgccgg gagctgcagc gctgagaccc ccagcccgcc
                                                                        60
ccctcgggct cccggccggg gccccatcat gttctccagg aagaaacgag agctcatgaa
                                                                       120
aaccccttcc atctcgaaaa agaaccgcgc gggaagcccc agcccgcagc cctcggggga
                                                                       180
                                                                       240
gctgcccagg aaggatgggg ctgacgcggt gttccccgga ccaagcctgg agccgcccgc
tgggtcctcc ggcgtcaagg ccacagggac cctcaagegg cccaccagcc tgagccgcca
                                                                       300
                                                                       360
cgccagcgcg gctggcttcc ccctgtcggg tgctgcctcc tggacactgg gccggagcca
ccggagccca ctgacagccg ccagcccggg cgagctgccc accgagggtg ccggcccgga
                                                                       420
```

cgtcgtcgag	gacatctccc	atctgctggc	ggacgtggcc	cgcttcgctg	agggccttga	480
gaaacttaag	gagtgtgtgt	tgcgtgacga	cctccttgag	gcccgccgcc	cgcgggccca	540
cgagtgcctg	ggtgaggctc	tgcgtgtcat	gcatcagatc	atctccaagt	acccgctgct	600
gaacaccgtg	gagacgctca	ccgcagccgg	caccctcatt	gccaaggtca	aagccttcca	660
ttatgagagc	aacaatgatc	tggagaaaca	ggagttcgag	aaggccctgg	agacgattgc	720
tgtggccttc	agtagcacag	tgtccgagtt	cctcatgggt	gaagtggaca	gcagcaccct	780
cctagcagtg	cctcctgggg	actcgagcca	gtccatggaa	agcctgtatg	gaccgggcag	840
tgagggcacg	cctcccagcc	tggaagactg	tgacgccggc	tgcctgcccg	ccgaggaggt	900
ggacgtgctg	ctacagcgct	gtgaggggg	cgtggatgcc	gcactgctgt	atgccaagaa	960
catggccaag	tacatgaagg	acctcatcag	ctacctggag	aagcggacga	cgctggagat	1020
ggagtttgcc	aagggcctgc	agaagatcgc	tcacaactgc	agacagagcg	tcatgcagga	1080
gccccacatg	ccgctcctgt	ccatctactc	gctggccctg	gagcaggacc	tggagttcgg	1140
ccacagcatg	gtgcaggcgg	tgggcacctt	gcagacccag	accttcatgc	agcccctgac	1200
cctgcggcgg	cttgaacacg	agaagcgcag	gaaggagatc	aaggaggcct	ggcaccgtgc	1260
ccagaggaag	ctgcaagagg	cggagtccaa	cctgcgcaag	gccaagcagg	gttacgtgca	1320
gcgctgcgag	gaccacgaca	aggctcgctt	cctcgtggcc	aaggcggagg	aggagcaggc	1380
tggcagcgcg	ccgggagcag	gcagcacggc	caccaagacc	ctggacaagc	ggcggcggct	1440
ggaggaggag	gccaagaaca	aggcggagga	agctatggcc	acctaccgca	cctgcgtggc	1500
cgacgcgaag	acgcagaagc	aggagctgga	ggataccaag	gtgacggcgc	tgcggcagat	1560
ccaggaggtc	atccggcaga	gcgaccaaac	catcaagtcg	gccacgatct	cctactacca	1620
gatgatgcat	atgcagacgg	cgccgctgcc	cgtgcacttc	cagatgctgt	gtgagagcag	1680
caagctgtat	gacccaggcc	agcagtacgc	ctcccacgtg	cgccagctgc	agcgggacca	1740
ggagcccgat	gtgcactacg	actttgagcc	ccacgtctcc	gccaacgcct	ggtcccccgt	1800
catgcgtgcc	cggaagagca	gcttcaacgt	gagtgatgtg	gcgcggccgg	aggctgccgg	1860
gagcccccca	gaagaaggcg	ggtgcactga	gggcacacct	gccaaggacc	acagggccgg	1920
gcgaggacac	caggttcaca	agtcatggcc	gctctcgatc	tcagactcgg	acagtgggct	1980
ggaccccggc	cctggcgcag	gggactttaa	gaagttcgag	cggacgtcat	ccagtggtac	2040
catgtcgtcc	acggaggagc	tggtggaccc	agacggtgga	gccggggctt	cagcctttga	2100
gcaggctgac	ctcaacggca	tgacccccga	gctgccggtg	gccgtgccca	gtggaccgtt	2160
ccgccacgag	gggctgtcca	aggcggcccg	tactcaccgg	ctccggaagc	tccgcacgcc	2220
	cgcgagtgca					2280
ctgcctggcc	tgccacaaga	aatgtctgga	gacgctggcc	atacagtgcg	ggcacaagaa	2340
gctgcaaggc	cgcctgcagc	tgttcggcca	ggacttcagc	cacgcggccc	gcagcgcccc	2400
	cccttcatcg					2460
	atctaccggg		_			2520
	ggcaaggagc					2580
	ctctacctgc					2640
	gggctggcca					2700
	caggacggct					2760
	ctgcgggacc					2820
	aggatcgtgg					2880
	gggcccacgc					2940
	gattatcccc					3000
	gaggaggagc					3060
	gtagtcgtcc					3120
	gcggcggcgg					3180
ctcggaccta	gaggaggcct	ccgagetget	geceteateg	gaggccagtg	ecctgggcca	3240

```
cetcagette etggageage ageagagega ggccageeta gaggtggett etggcageea
                                                                     3300
                                                                     3360
cagcggcagt gaggagcagc tggaggccac agcccgggag gacggggacg gggacgagga
                                                                     3420
eggeeeggee cageagetet caggatteaa caccaaccag tecaacaacg tgetgeagge
                                                                     3480
cccactgccc cccatgaggc tccgtggcgg gcggatgaca ctgggctcct gcagggaaag
                                                                     3540
gcagccggaa ttcgtgtgag ctggggtggg gctgggacca caggtggctt ctctcttgcc
tgctcctgtc cctccagcac gtcccctgca ccacggcata gcttaggtgc gccgtcctgg
                                                                      3600
                                                                      3660
ggtcgctgcc gagagcgcct ggacttcgac gtcccaccag cgggcgcctc ctcccagagg
cttccaggag cacgagggcc ttgcggcaca ggactgtgcc ctgtgctgtc ccctgcaccc
                                                                      3720
eggeteaget gagetgggga acaetgetgt egtgtgaagt caeagtggee ttgttggtge
                                                                      3780
                                                                      3840
ccacagggct gtgtggatgg aggaagctgt ccctgcccag tgcatcccc aggtcatcac
                                                                      3900
ggggacgcag gaggcaggcc ctgccctgcc ctctcctcac aggtctgttg cagggactcc
agaaaccatt ctgggagccg tggatggggg cggagctggg gtttggtgca gtttccaggg
                                                                      3960
tgcagtacag cagggcctga atactggccc tggactccct tttccagaac accaggtgtg
                                                                      4020
                                                                      4080
gccacctggg gctcaggtac acagtggggt ctctcggaag ccaccgtgtg gttctttcac
                                                                      4121
aggcacgttt attttgctga aataaaaagt ttttaatcgg g
       353
4792
DNA
Homo sapiens
^{<\!400>} 353 ggaccacca gtaccgatcc cttcacgacc gtcaccatgg aagtgtcacc attgcagcct
                                                                        60
                                                                       120
gtaaatgaaa atatgcaagt caacaaaata aagaaaaatg aagatgctaa gaaaagactg
tctgttgaaa gaatctatca aaagaaaaca caattggaac atattttgct ccgcccagac
                                                                       180
acctacattg gttctgtgga attagtgacc cagcaaatgt gggtttacga tgaagatgtt
                                                                       240
ggcattaact atagggaagt cacttttgtt cctggtttgt acaaaatctt tgatgagatt
                                                                       300
                                                                       360
ctagttaatg ctgcggacaa caaacaaagg gacccaaaaa tgtcttgtat tagagtcaca
                                                                       420
attgatccgg aaaacaattt aattagtata tggaataatg gaaaaggtat tcctgttgtt
gaacacaaag ttgaaaagat gtatgtccca gctctcatat ttggacagct cctaacttct
                                                                       480
                                                                       540
agtaactatg atgatgatga aaagaaagtg acaggtggtc gaaatggcta tggagccaaa
ttgtgtaaca tattcagtac caaatttact gtggaaacag ccagtagaga atacaagaaa
                                                                       600
atgttcaaac agacatggat ggataatatg ggaagagctg gtgagatgga actcaagccc
                                                                       660
                                                                       720
ttcaatggag aagattatac atgtatcacc tttcagcctg atttgtctaa gtttaaaatg
caaagcctgg acaaagatat tgttgcacta atggtcagaa gagcatatga tattgctgga
                                                                       780
tccaccaaag atgtcaaagt ctttcttaat ggaaataaac tgccagtaaa aggatttcgt
                                                                       840
                                                                       900
agttatgtgg acatgtattt gaaggacaag ttggatgaaa ctggtaactc cttgaaagta
atacatgaac aagtaaacca caggtgggaa gtgtgtttaa ctatgagtga aaaaggcttt
                                                                       960
                                                                      1020
cagcaaatta gctttgtcaa cagcattgct acatccaagg gtggcagaca tgttgattat
gtagctgatc agattgtgac taaacttgtt gatgttgtga agaagaagaa caagggtggt
                                                                      1080
                                                                      1140
gttgcagtaa aagcacatca ggtgaaaaat cacatgtgga tttttgtaaa tgccttaatt
gaaaacccaa cctttgactc tcagacaaaa gaaaacatga ctttacaacc caagagcttt
                                                                      1200
ggatcaacat gccaattgag tgaaaaattt atcaaagctg ccattggctg tggtattgta
                                                                      1260
gaaagcatac taaactgggt gaagtttaag gcccaagtcc agttaaacaa gaagtgttca
                                                                      1320
                                                                      1380
gctgtaaaac ataatagaat caagggaatt cccaaactcg atgatgccaa tgatgcaggg
                                                                      1440
ggccgaaact ccactgagtg tacgcttatc ctgactgagg gagattcagc caaaactttg
                                                                      1500
gctgtttcag gccttggtgt ggttgggaga gacaaatatg gggttttccc tcttagagga
aaaatactca atgttcgaga agcttctcat aagcagatca tggaaaatgc tgagattaac
                                                                      1560
                                                                      1620
aatatcatca agattgtggg tcttcagtac aagaaaaact atgaagatga agattcattg
aagacgcttc gttatgggaa gataatgatt atgacagatc aggaccaaga tggttcccac
                                                                      1680
atcaaaggct tgctgattaa ttttatccat cacaactggc cctctcttct gcgacatcgt
                                                                      1740
```

```
1800
tttctggagg aatttatcac tcccattgta aaggtatcta aaaacaagca agaaatggca
                                                                     1860
ttttacagcc ttcctgaatt tgaagagtgg aagagttcta ctccaaatca taaaaaatgg
                                                                     1920
aaagtcaaat attacaaagg tttgggcacc agcacatcaa aggaagctaa agaatacttt
                                                                     1980
gcagatatga aaagacatcg tatccagttc aaatattctg gtcctgaaga tgatgctgct
                                                                     2040
atcagectgg cetttageaa aaaacagata gatgategaa aggaatggtt aactaattte
                                                                     2100
atggaggata gaagacaacg aaagttactt gggcttcctg aggattactt gtatggacaa
                                                                     2160
actaccacat atctgacata taatgacttc atcaacaagg aacttatctt gttctcaaat
                                                                     2220
tctgataacg agagatctat cccttctatg gtggatggtt tgaaaccagg tcagagaaag
                                                                     2280
gttttgttta cttgcttcaa acggaatgac aagcgagaag taaaggttgc ccaattagct
                                                                     2340
ggatcagtgg ctgaaatgtc ttcttatcat catggtgaga tgtcactaat gatgaccatt
                                                                     2400
atcaatttgg ctcagaattt tgtgggtagc aataatctaa acctcttgca gcccattggt
cagtttggta ccaggctaca tggtggcaag gattctgcta gtccacgata catctttaca
                                                                     2460
                                                                     2520
atgctcagct ctttggctcg attgttattt ccaccaaaag atgatcacac gttgaagttt
                                                                     2580
ttatatgatg acaaccagcg tgttgagcct gaatggtaca ttcctattat tcccatggtg
                                                                     2640
ctgataaatg gtgctgaagg aatcggtact gggtggtcct gcaaaatccc caactttgat
                                                                     2700
gtgcgtgaaa ttgtaaataa catcaggcgt ttgatggatg gagaagaacc tttgccaatg
                                                                     2760
cttccaagtt acaagaactt caagggtact attgaagaac tggctccaaa tcaatatgtg
                                                                     2820
attagtggtg aagtagctat tcttaattct acaaccattg aaatctcaga gcttcccgtc
                                                                     2880
agaacatgga cccagacata caaagaacaa gttctagaac ccatgttgaa tggcaccgag
aagacacctc ctctcataac agactatagg gaataccata cagataccac tgtgaaattt
                                                                     2940
                                                                     3000
gttgtgaaga tgactgaaga aaaactggca gaggcagaga gagttggact acacaaagtc
ttcaaactcc aaactagtct cacatgcaac tctatggtgc tttttgacca cgtaggctgt
                                                                     3060
                                                                     3120
ttaaagaaat atgacacggt gttggatatt ctaagagact tttttgaact cagacttaaa
                                                                     3180
tattatggat taagaaaaga atggctccta ggaatgcttg gtgctgaatc tgctaaactg
                                                                     3240
aataatcagg ctcgctttat cttagagaaa atagatggca aaataatcat tgaaaataag
                                                                     3300
cctaagaaag aattaattaa agttctgatt cagaggggat atgattcgga tcctgtgaag
gcctggaaag aagcccagca aaaggttcca gatgaagaag aaaatgaaga gagtgacaac
                                                                     3360
                                                                     3420
gaaaaggaaa ctgaaaagag tgactccgta acagattctg gaccaacctt caactatctt
                                                                     3480
cttgatatgc ccctttggta tttaaccaag gaaaagaaag atgaactctg caggctaaga
                                                                     3540
aatgaaaaag aacaagagct ggacacatta aaaagaaaga gtccatcaga tttgtggaaa
                                                                     3600
gaagacttgg ctacatttat tgaagaattg gaggctgttg aagccaagga aaaacaagat
                                                                     3660
gaacaagtcg gacttcctgg gaaagggggg aaggccaagg ggaaaaaaac acaaatggct
                                                                     3720
gaagttttgc cttctccgcg tggtcaaaga gtcattccac gaataaccat agaaatgaaa
gcagaggcag aaaagaaaaa taaaaagaaa attaagaatg aaaatactga aggaagccct
                                                                     3780
                                                                     3840
caagaagatg gtgtggaact agaaggccta aaacaaagat tagaaaagaa acagaaaaga
                                                                     3900
gaaccaggta caaagacaaa gaaacaaact acattggcat ttaagccaat caaaaaagga
                                                                     3960
aagaagagaa atccctggcc tgattcagaa tcagatagga gcagtgacga aagtaatttt
                                                                     4020
gatgtccctc cacgagaaac agagccacgg agagcagcaa caaaaacaaa attcacaatg
gatttggatt cagatgaaga tttctcagat tttgatgaaa aaactgatga tgaagatttt
                                                                     4080
gtcccatcag atgctagtcc acctaagacc aaaacttccc caaaacttag taacaaagaa
                                                                     4140
ctgaaaccac agaaaagtgt cgtgtcagac cttgaagctg atgatgttaa gggcagtgta
                                                                     4200
                                                                     4260
ccactgtctt caagccctcc tgctacacat ttcccagatg aaactgaaat tacaaaccca
gttcctaaaa agaatgtgac agtgaagaag acagcagcaa aaagtcagtc ttccacctcc
                                                                     4320
                                                                     4380
actaccggtg ccaaaaaaag ggctgcccca aaaggaacta aaagggatcc agctttgaat
                                                                     4440
tetggtgtet eteaaaagee tgateetgee aaaaceaaga ategeegeaa aaggaageea
                                                                     4500
tccacttctg atgattctga ctctaatttt gagaaaattg tttcgaaagc agtcacaagc
                                                                     4560
aagaaatcca agggggagag tgatgacttc catatggact ttgactcagc tgtggctcct
cgggcaaaat ctgtacgggc aaagaaacct ataaagtacc tggaagagtc agatgaagat
                                                                     4620
```

```
gatctgtttt aaaatgtgag gcgattattt taagtaatta tcttaccaag cccaagactg
                                                                      4680
gttttaaagt tacctgaagc tcttaacttc ctcccctctg aatttagttt ggggaaggtg
                                                                      4740
tttttagtac aagacatcaa agtgaagtaa agcccaagtg ttctttagct tt
                                                                      4792
       354
1685
DNA
Homo sapiens
<400> 354
gagtagetge ttteggteeg ceggacaeae eggacagata gaegtgegga eggeceaeca
                                                                        60
ecceageeeg ceaactagte ageetgegee tggegeetee ceteteeagg tecateegee
                                                                       120
atgtggcccc tgtggcgcct cgtgtctctg ctggccctga gccaggccct gccctttgag
                                                                       180
cagagaggct tetgggactt caccetggac gatgggccat teatgatgaa cgatgaggaa
                                                                       240
gcttcgggcg ctgacacctc aggcgtcctg gacccggact ctgtcacacc cacctacagc
                                                                       300
gccatgtgtc ctttcggctg ccactgccac ctgcgggtgg ttcagtgctc cgacctgggt
                                                                       360
ctgaagtctg tgcccaaaga gatctcccct gacaccacgc tgctggacct gcagaacaac
                                                                       420
gacateteeg ageteegeaa ggatgaette aagggtetee ageaceteta egecetegte
                                                                       480
ctggtgaaca acaagatctc caagatccat gagaaggcct tcagcccact gcggaagctg
                                                                       540
cagaagetet acatetecaa gaaceacetg gtggagatee egeceaacet acceagetee
                                                                       600
ctggtggagc tccgcatcca cgacaaccgc atccgcaagg tgcccaaggg agtgttcagc
                                                                       660
gggctccgga acatgaactg catcgagatg ggcgggaacc cactggagaa cagtggcttt
                                                                       720
gaacctggag cettegatgg cetgaagete aactacetge geateteaga ggecaagetg
                                                                       780
actggcatcc ccaaagacct ccctgagacc ctgaatgaac tccacctaga ccacaacaaa
                                                                       840
                                                                       900
atccaggcca tcgaactgga ggacctgctt cgctactcca agctgtacag gctgggccta
                                                                       960
ggccacaacc agatcaggat gatcgagaac gggagcctga gcttcctgcc caccctccgg
                                                                      1020
gagetecaet tggacaacaa caagttggee agggtgeeet cagggetece agaeeteaag
ctcctccagg tggtctatct gcactccaac aacatcacca aagtgggtgt caacgacttc
                                                                      1080
tgtcccatgg gcttcggggt gaagcgggcc tactacaacg gcatcagcct cttcaacaac
                                                                      1140
cccgtgccct actgggaggt gcagccggcc actttccgct gcgtcactga ccgcctggcc
                                                                      1200
                                                                      1260
atccagtttg gcaactacaa aaagtagagg cagctgcagc caccgcgggg cctcagtggg
                                                                      1320
ggtctctggg gaacacagcc agacatcctg atggggaggc agagccagga agctaagcca
gggcccagct gcgtccaacc cagcccccca cctcaggtcc ctgaccccag ctcgatgccc
                                                                      1380
                                                                      1440
catcaccgcc tctccctggc tcccaagggt gcaggtgggc gcaaggcccg gcccccatca
catgtteect tggeeteaga getgeeeetg eteteecace acagecacee agaggeacee
                                                                      1500
                                                                      1560
catgaagett ttttctcgtt cacteccaaa cecaagtgte caaageteca gteetaggag
                                                                      1620
aacagtccct gggtcagcag ccaggaggcg gtccataaga atggggacag tgggctctgc
cagggctgcc gcacctgtcc agaacaacat gttctgttcc tcctcctcat gcatttccag
                                                                      1680
ccttg
                                                                      1685
       355
2334
DNA
Homo sapiens
^{<\!400>} 355 agacacetet geceteacea tgageetetg geageecetg gteetggtge teetggtget
                                                                        60
gggctgctgc tttgctgccc ccagacagcg ccagtccacc cttgtgctct tccctggaga
                                                                       120
cctgagaacc aatctcaccg acaggcagct ggcagaggaa tacctgtacc gctatggtta
                                                                       180
cactegggtg geagagatge gtggagagte gaaatetetg gggeetgege tgetgettet
                                                                       240
ccagaagcaa ctgtccctgc ccgagaccgg tgagctggat agcgccacgc tgaaggccat
                                                                       300
                                                                       360
gcgaacccca cggtgcgggg tcccagacct gggcagattc caaacctttg agggcgacct
caagtggcac caccacaaca tcacctattg gatccaaaac tactcggaag acttgccgcg
                                                                       420
ggcggtgatt gacgacgcct ttgcccgcgc cttcgcactg tggagcgcgg tgacgccgct
                                                                       480
```

```
caccttcact cgcgtgtaca gccgggacgc agacatcgtc atccagtttg gtgtcgcgga
                                                                       540
                                                                       600
gcacggagac gggtatccct tcgacgggaa ggacgggctc ctggcacacg cctttcctcc
                                                                       660
tggccccggc attcagggag acgcccattt cgacgatgac gagttgtggt ccctgggcaa
gggcgtcgtg gttccaactc ggtttggaaa cgcagatggc gcggcctgcc acttcccctt
                                                                       720
catcttcgag ggccgctcct actctgcctg caccaccgac ggtcgctccg acggcttgcc
                                                                       780
                                                                       840
ctggtgcagt accacggcca actacgacac cgacgacegg tttggcttct gccccagega
gagactetae accegggacg geaatgetga tgggaaacce tgccagttte catteatett
                                                                       900
                                                                       960
ccaaggccaa tectacteeg cetgeaceae ggaeggtege teegaegget acegetggtg
cgccaccacc gccaactacg accgggacaa gctcttcggc ttctgcccga cccgagctga
                                                                      1020
                                                                      1080
ctcgacggtg atggggggca actcggcggg ggagctgtgc gtcttcccct tcactttcct
                                                                      1140
gggtaaggag tactcgacct gtaccagcga gggccgcgga gatgggcgcc tctggtgcgc
taccacctcg aactttgaca gcgacaagaa gtggggcttc tgcccggacc aaggatacag
                                                                      1200
tttgttcctc gtggcggcgc atgagttcgg ccacgcgctg ggcttagatc attcctcagt
                                                                      1260
gccggaggcg ctcatgtacc ctatgtaccg cttcactgag gggcccccct tgcataagga
                                                                      1320
                                                                      1380
cgacgtgaat ggcatccggc acctctatgg tectcgccct gaacctgagc cacggcctcc
aaccaccacc acaccgcagc ccacggctcc cccgacggtc tgccccaccg gaccccccac
                                                                      1440
                                                                      1500
tgtccacccc tcagagegec ccacagetgg ccccacaggt cccccctcag ctggccccac
                                                                      1560
aggtccccc actgctggcc cttctacggc cactactgtg cctttgagtc cggtggacga
tgcctgcaac gtgaacatct tcgacgccat cgcggagatt gggaaccagc tgtatttgtt
                                                                      1620
caaggatggg aagtactggc gattctctga gggcaggggg agccggccgc agggcccctt
                                                                      1680
cettategee gacaagtgge eegegetgee eegeaagetg gaeteggtet ttgaggagee
                                                                      1740
                                                                      1800
gctctccaag aagcttttct tcttctctgg gcgccaggtg tgggtgtaca caggcgcgtc
ggtgctgggc ccgaggcgtc tggacaagct gggcctggga gccgacgtgg cccaggtgac
                                                                      1860
                                                                      1920
eggggeeete eggagtggea gggggaagat getgetgtte agegggegge geetetggag
gttcgacgtg aaggcgcaga tggtggatcc ccggagcgcc agcgaggtgg accggatgtt
                                                                      1980
                                                                      2040
ccccggggtg cctttggaca cgcacgacgt cttccagtac cgagagaaag cctatttctg
ccaggaccgc ttctactggc gcgtgagttc ccggagtgag ttgaaccagg tggaccaagt
                                                                      2100
gggctacgtg acctatgaca tcctgcagtg ccctgaggac tagggctccc gtcctgcttt
                                                                      2160
                                                                      2220
gcagtgccat gtaaatcccc actgggacca accctgggga aggagccagt ttgccggata
                                                                      2280
caaactggta ttctgttctg gaggaaaggg aggagtggag gtgggctggg ccctctcttc
                                                                      2334
tcacctttgt tttttgttgg agtgtttcta ataaacttgg attctctaac cttt
       356
3220
DNA
Homo sapiens
^{<\!400>} 356 gagetgtece eggtgeegee gaeeegggee gtgeegtgtg eeegtggete eageegetge
                                                                        60
egectegate tectegtete eegeteegee etecetttte eetggatgaa ettgegteet
                                                                       120
ttctcttctc cgccatggaa ttctgctccg tgcttttagc cctcctgagc caaagaaacc
                                                                       180
ccagacaaca gatgcccata cgcagcgtat agcagtaact ccccagctcg gtttctgtgc
                                                                       240
cgtagtttac agtatttaat tttatataat atatattatt tattatagca tttttgatac
                                                                       300
                                                                       360
ctcatattct gtttacacat cttgaaaggc gctcagtagt tctcttacta aacaaccact
actccagaga atggcaacgc tgattaccag tactacagct gctaccgccg cttctggtcc
                                                                       420
                                                                       480
tttggtggac tacctatgga tgctcatcct gggcttcatt attgcatttg tcttggcatt
ctccgtggga gccaatgatg tagcaaattc ttttggtaca gctgtgggct caggtgtagt
                                                                       540
                                                                       600
gaccetgaag caageetgea teetagetag catetttgaa acagtggget etgtettaet
gggggccaaa gtgagcgaaa ccatccggaa gggcttgatt gacgtggaga tgtacaactc
                                                                       660
gactcaaggg ctactgatgg ccggctcagt cagtgctatg tttggttctg ctgtgtggca
                                                                       720
actcgtggct tcgtttttga agctccctat ttctggaacc cattgtattg ttggtgcaac
                                                                       780
```

```
tattggtttc tccctcgtgg caaaggggca ggagggtgtc aagtggtctg aactgataaa
                                                                     840
aattgtgatg tcttggttcg tgtccccact gctttctgga attatgtctg gaattttatt
                                                                     900
cttcctggtt cgtgcattca tcctccataa ggcagatcca gttcctaatg gtttgcgagc
                                                                     960
tttgccagtt ttctatgcct gcacagttgg aataaacctc ttttccatca tgtatactgg
                                                                    1020
                                                                    1080
agcaccgttg ctgggctttg acaaacttcc tctgtggggt accatcctca tctcggtggg
atgtgcagtt ttctgtgccc ttatcgtctg gttctttgta tgtcccagga tgaagagaaa
                                                                    1140
                                                                    1200
aattgaacga gaaataaagt gtagtccttc tgaaagcccc ttaatggaaa aaaagaatag
cttgaaagaa gaccatgaag aaacaaagtt gtctgttggt gatattgaaa acaagcatcc
                                                                    1260
                                                                    1320
tgtttctgag gtagggcctg ccactgtgcc cctccaggct gtggtggagg agagaacagt
ctcattcaaa cttggagatt tggaggaagc tccagagaga gagaggcttc ccagcgtgga
                                                                    1380
1440
gaaccttgtc cagttcagtc aagccgtcag caaccaaata aactccagtg gccactccca
                                                                    1500
gtatcacacc gtgcataagg attccggcct gtacaaagag ctactccata aattacatct
                                                                    1560
tgccaaggtg ggagattgca tgggagactc cggtgacaaa cccttaaggc gcaataatag
                                                                    1620
                                                                    1680
ctatacttcc tataccatgg caatatgtgg catgcctctg gattcattcc gtgccaaaga
aggtgaacag aagggcgaag aaatggagaa gctgacatgg cctaatgcag actccaagaa
                                                                    1740
                                                                    1800
gcgaattcga atggacagtt acaccagtta ctgcaatgct gtgtctgacc ttcactcagc
                                                                    1860
atctgagata gacatgagtg tcaaggcagc gatgggtcta ggtgacagaa aaggaagtaa
                                                                    1920
tggctctcta gaagaatggt atgaccagga taagcctgaa gtctctctcc tcttccagtt
cctgcagatc cttacagcct gctttgggtc attcgcccat ggtggcaatg acgtaagcaa
                                                                    1980
tgccattggg cctctggttg ctttatattt ggtttatgac acaggagatg tttcttcaaa
                                                                    2040
agtggcaaca ccaatatggc ttctactcta tggtggtgtt ggtatctgtg ttggtctgtg
                                                                    2100
ggtttgggga agaagagtta tccagaccat ggggaaggat ctgacaccga tcacaccctc
                                                                    2160
tagtggette agtattgaae tggeatetge eetcaetgtg gtgattgeat caaatattgg
                                                                    2220
ccttcccatc agtacaacac attgtaaagt gggctctgtt gtgtctgttg gctggctccg
                                                                    2280
gtccaagaag gctgttgact ggcgtctctt tcgtaacatt tttatggcct ggtttgtcac
                                                                    2340
agtccccatt tctggagtta tcagtgctgc catcatggca atcttcagat atgtcatcct
                                                                    2400
cagaatgtga agctgtttga gattaaaatt tgtgtcaatg tttgggacca tcttaggtat
                                                                    2460
tectgetece etgaagaatg attacagtgt taacagaaga etgacaagag tetttttatt
                                                                    2520
tgggagcaga ggagggaagt gttacttgtg ctataactgc ttttgtgcta aatatgaatt
                                                                    2580
gtctcaaaat tagctgtgta aaatagcccg ggttccactg gctcctgctg aggtcccctt
                                                                    2640
teettetggg etgtgaatte etgtacatat ttetetaett tttgtateag getteaatte
                                                                    2700
cattatgttt taatgttgtc tctgaagatg acttgtgatt tttttttctt tttttaaac
                                                                    2760
catgaagagc cgtttgacag agcatgctct gcgttgttgg tttcaccagc ttctgccctc
                                                                    2820
acatgcacag ggatttaaca acaaaaatat aactacaact tcccttgtag tctcttatat
                                                                    2880
aagtagagtc cttggtactc tgccctcctg tcagtagtgg caggatctat tggcatattc
                                                                    2940
gggagcttct tagagggatg aggttctttg aacacagtga aaatttaaat tagtaacttt
                                                                    3000
tttgcaagca gtttattgac tgttattgct aagaagaagt aagaaagaaa aagcctgttg
                                                                    3060
gcaatcttgg ttatttcttt aagatttctg gcagtgtggg atggatgaat gaagtggaat
                                                                    3120
                                                                    3180
gtgaactttg ggcaagttaa atgggacagc cttccatgtt catttgtcta cctcttaact
gaataaaaa gcctacagtt tttagaaaaa acccgaattc
                                                                    3220
      357
835
DNA
Homo sapiens
atggegagea geggagteaa gaacacaeca egatggegga gaaaageece teatgggagg
                                                                      60
gaaaggaaag agaaaggaaa gaaaagaaaa agatgtatct ggtcaactcc aaaaaggaga
                                                                     120
cataagaaaa aaagcctccc aagagagatc attgatggca cttcagaaat gaatgaagga
                                                                     180
```

```
aagaggtccc agaagatgcc tagtacacca cgaagggtca cacaaggggc agcctcacct
                                                                       240
                                                                       300
gggcatggca tccaagagaa gctccaagtg gtggataagg tgactcaaag gaaagacgac
                                                                       360
tcaacctgga actcagaggt catgatgagg gtccaaaagg caagaactaa atgtgcccga
                                                                       420
aagtccagat cgaaagaaaa gaaaaaggag aaagatatct gttcaagctc aaaaaggaga
                                                                       480
tttcagaaaa atattcaccg aagaggaaaa cccaaaagtg acactgtgga ttttcactgt
tctaagtccc ccgtgacctg tggtgaggcg aaagggattt tatataagaa gaaaatgaaa
                                                                       540
                                                                       600
cacqqatcct cagtgaagtg cattcggaat gaggatggaa cttggttaac accaaatgaa
tttgaagtcg aaggaaaagg aaggaacgca aagaactgga aacggaatat acgttgtgaa
                                                                       660
                                                                       720
ggaatgaccc taggagagct gctgaagagt ggacttttgc tctgtcctcc aagaataaat
                                                                       780
ctcaagagag agttaaatag caagtgaatt tctactaccc tctcagtcac catgttgcag
                                                                       835
actttccctg tctggagget caccttagag cttctgagtt tccaageceg gaatt
       358
840
DNA
Homo sapiens
^{<\!400>} 358 ccggtgagtc gccggcgctg cagagggagg cggcactggt ctcgacgtgg ggcggccagc
                                                                        60
                                                                       120
gatgaageeg eecagtteaa tacaaacaag tgagtttgae teateagatg aagageetat
tgaagatgaa cagactccaa ttcatatatc atggctatct ttgtcacgag tgaattgttc
                                                                       180
                                                                       240
tragtttete ggtttatgtg etetteragg ttgtaaattt aaagatgtta gaagaaatgt
ccaaaaagat acagaagaac taaagagctg tggtatacaa gacatatttg ttttctgcac
                                                                       300
cagaggggaa ctgtcaaaat atagagtccc aaaccttctg gatctctacc agcaatgtgg
                                                                       360
aattatcacc catcatcatc caatcgcaga tggagggact cctgacatag ccagctgctg
                                                                       420
tgaaataatg gaagagetta caacetgeet taaaaattac egaaaaacet taatacaetg
                                                                       480
ctatggagga cttgggagat cttgtcttgt agctgcttgt ctcctactat acctgtctga
                                                                       540
                                                                       600
cacaatatca ccagagcaag ccatagacag cctgcgagac ctaagaggat ccggggcaat
                                                                       660
acagaccatc aagcaataca attatcttca tgagtttcgg gacaaattag ctgcacatct
                                                                       720
atcatcaaga gattcacaat caagatctgt atcaagataa aggaattcaa atagcatata
                                                                       780
tatgaccatg totgaaatgt cagttotota gcataatttg tattgaaaat gaaaccacca
                                                                       840
gtcgttatca acttgaatgt aaatgtacat gtgcagatat tcctaaagtg ccttcgtggc
       359
2439
DNA
Homo sapiens
<400> 359 cagcaccag ctccccgcca ccgccatggt ccccgacacc gcctgcgttc ttctgctcac
                                                                        60
cctggctgcc ctcggcgcgt ccggacaggg ccagagcccg ttgggctcag acctgggccc
                                                                       120
                                                                       180
gcagatgctt cgggaactgc aggaaaccaa cgcggcgctg caggacgtgc gggactggct
                                                                       240
geggeageag gteagggaga teaegtteet gaaaaacaeg gtgatggagt gtgaegegtg
                                                                       300
egggatgeag cagteagtae geaceggeet acceagegtg eggeeeetge tecaetgege
                                                                       360
geoeggette tgetteeeeg gegtggeetg cateeagaeg gagageggeg geegetgegg
cccctgcccc gcgggcttca cgggcaacgg ctcgcactgc accgacgtca acgagtgcaa
                                                                       420
                                                                       480
egeceacece tgetteecee gagteegetg tateaacace ageceggggt teegetgega
                                                                       540
ggcttgcccg ccggggtaca gcggccccac ccaccagggc gtggggctgg ctttcgccaa
                                                                       600
ggccaacaag caggtttgca cggacatcaa cgagtgtgag accgggcaac ataactgcgt
ccccaactcc gtgtgcatca acaccegggg ctccttccag tgcggcccgt gccagcccgg
                                                                       660
                                                                       720
ettegtggge gaccaggegt eeggetgeca gegeggegea cagegettet geecegaegg
                                                                       780
ctcgcccage gagtgccacg agcatgcaga ctgcgtccta gagcgcgatg gctcgcggtc
                                                                       840
gtgcgtgtgt cgcgttggct gggccggcaa cgggatcctc tgtggtcgcg acactgacct
agacggcttc ccggacgaga agctgcgctg cccggagccg cagtgccgta aggacaactg
                                                                       900
                                                                       960
cgtgactgtg cccaactcag ggcaggagga tgtggaccgc gatggcatcg gagacgcctg
```

```
cgatccggat gccgacgggg acggggtccc caatgaaaag gacaactgcc cgctggtgcg
                                                                     1020
                                                                      1080
gaacccagac cagcgcaaca cggacgagga caagtggggc gatgcgtgcg acaactgccg
gtcccagaag aacgacgacc aaaaggacac agaccaggac ggccgggggg atgcgtgcga
                                                                      1140
                                                                      1200
cgacgacatc gacggcgacc ggatccgcaa ccaggccgac aactgcccta gggtacccaa
                                                                      1260
ctcagaccag aaggacagtg atggcgatgg tataggggat gcctgtgaca actgtcccca
qaaqaqcaac ccggatcagg cggatgtgga ccacgacttt gtgggagatg cttgtgacag
                                                                      1320
cgatcaagac caggatggag acggacatca ggactctcgg gacaactgtc ccacggtgcc
                                                                      1380
taacagtgcc caggaggact cagaccacga tggccagggt gatgcctgcg acgacgacga
                                                                      1440
cgacaatgac ggagtccctg acagtcggga caactgccgc ctggtgccta accccggcca
                                                                      1500
                                                                      1560
ggaggacgcg gacagggacg gcgtgggcga cgtgtgccag gacgactttg atgcagacaa
                                                                      1620
ggtggtagac aagatcgacg tgtgtccgga gaacgctgaa gtcacgctca ccgacttcag
                                                                      1680
ggccttccag acagtcgtgc tggacccgga gggtgacgcg cagattgacc ccaactgggt
                                                                      1740
ggtgctcaac cagggaaggg agatcgtgca gacaatgaac agcgacccag gcctggctgt
gggttacact gccttcaatg gcgtggactt cgagggcacg ttccatgtga acacggtcac
                                                                      1800
                                                                      1860
ggatgacgac tatgcgggct tcatctttgg ctaccaggac agctccagct tctacgtggt
                                                                      1920
catgtggaag cagatggagc aaacgtattg gcaggcgaac cccttccgtg ctgtggccga
gcctggcatc caactcaagg ctgtgaagtc ttccacaggc cccggggaac agctgcggaa
                                                                      1980
                                                                      2040
cgctctgtgg catacaggag acacagagtc ccaggtgcgg ctgctgtgga aggacccgcg
                                                                      2100
aaacgtgggt tggaaggaca agaagtccta tcgttggttc ctgcagcacc ggccccaagt
gggctacatc agggtgcgat tctatgaggg ccctgagctg gtggccgaca gcaacgtggt
                                                                      2160
                                                                      2220
cttggacaca accatgcggg gtggccgcct gggggtcttc tgcttctccc aggagaacat
catctgggcc aacctgcgtt accgctgcaa tgacaccatc ccagaggact atgagaccca
                                                                      2280
                                                                      2340
tcagctgcgg caagcctagg gaccagggtg aggacccgcc ggatgacagc caccctcacc
                                                                      2400
geggetggat gggggetetg cacceagece aaggggtgge egteetgagg gggaagtgag
                                                                      2439
aagggctcag agaggacaaa ataaagtgtg tgtgcaggg
       360
1488
DNA
Homo sapiens
<400> 360 cgcgacggct gagcaaggac tetecagtee teagteacet tggacaaaga agtgtggate
                                                                        60
                                                                       120
ctcagattcc atcttttcca actccaaggt gccatggcag agaaggtgct ggtaacaggt
ggggctggct acattggcag ccacacggtg ctggagctgc tggaggctgg ctacttgcct
                                                                       180
                                                                       240
gtggtcatcg ataacttcca taatgcette cgtggagggg getecetgee tgagageetg
cggcgggtcc aggagctgac aggccgctct gtggagtttg aggagatgga cattttggac
                                                                       300
                                                                       360
cagggagccc tacagcgtct cttcaaaaag tacagcttta tggcggtcat ccactttgcg
gggctcaagg ccgtgggcga gtcggtgcag aagcctctgg attattacag agttaacctg
                                                                       420
accgggacca tccagcttct ggagatcatg aaggcccacg gggtgaagaa cctggtgttc
                                                                       480
agcageteag ecaetgtgta egggaaceee eagtacetge ecettgatga ggeceaceee
                                                                       540
acgggtggtt gtaccaaccc ttacggcaag tccaagttct tcatcgagga aatgatccgg
                                                                       600
                                                                       660
gacctgtgcc aggcagacaa gacttggaac gtagtgctgc tgcgctattt caaccccaca
                                                                       720
ggtgcccatg cctctggctg cattggtgag gatccccagg gcatacccaa caacctcatg
                                                                       780
cettatgtet cecaggtgge gategggega egggaggeee tgaatgtett tggeaatgae
tatgacacag aggatggcac aggtgtccgg gattacatcc atgtcgtgga tctggccaag
                                                                       840
                                                                       900
ggccacattg cagcettaag gaagetgaaa gaacagtgtg getgeeggat etacaacetg
                                                                       960
ggcacgggca caggctattc agtgctgcag atggtccagg ctatggagaa ggcctctggg
                                                                      1020
aagaagatee egtacaaggt ggtggeaegg egggaaggtg atgtggeage etgttaegee
aaccccagcc tggcccaaga ggagctgggg tggacagcag ccttagggct ggacaggatg
                                                                      1080
```

tgtgaggate tetggegetg geagaageag aateetteag getttggeae geaageetga

1140

```
1200
ggaccctccc ctaccaagga ccaggaaaag cagcagctgc ctgctctcca gcctctggag
gaactcaggg ccctggagct gctggggcca agccaagggc ctcccctacc tcaaacccca
                                                                     1260
gctgggcccg cttagcccac caggcatgag gccaaggctc cactgaccag gaggccgagg
                                                                     1320
                                                                     1380
tctctaactc ttatcttcca cagggtccaa gagttcatca ggacccccaa gagtgagtga
                                                                     1440
qqqqqcaaqq ctctggcaca aaacctcctc ctcccaggca ctcatttata ttgctctgaa
                                                                     1488
agagetttee aaagtattta aaaataaaaa caagttttet tacaetgg
       361
2806
DNA
Homo sapiens
ggatccagga ctgagatccc agaaccatga acctggccat cagcatcgct ctcctgctaa
                                                                       60
caggtacccg gcatggggca ggactggggc tccaggcgcc ctggcttcct tccctccaga
                                                                      120
gaagcagctt ctccctcaca gtctcagaaa agcgcaggtg acaaagagag ggctcttttt
                                                                      180
catcctgaag tcagccgatc caccgcgctg atattctgac ggcctgaggt ggtttttgga
                                                                      240
                                                                      300
aacacaqttt gctgagccct ccttcacact attgaactag aatccccaac tgagaaccca
ggaaccagca tcaactccct aagatctcct gtccttgaaa cacattgata ggatccaagg
                                                                      360
                                                                      420
ctcaagcaga gtggggaggg aggctggggt ctgcaaagga gaagtgggat ccctggggtg
                                                                      480
qqqaaaqqca ctcaqaqaqc agaccccqqt cccctcccta gccaqqccca tctctccact
tcaggtgggt gggaggcccc tgtgccgcag gcccctccag tttgaaggag gcactgctgg
                                                                      540
                                                                      600
tgccagtctt gcaggtctcc cgagggcaga aggtgaccag cctaacggcc tgcctagtgg
                                                                      660
accagageet tegtetggae tgeegeeatg agaataceag cagtteacee atceagtacg
                                                                      720
agttcagcct gacccgtgag acaaagaagc acgtgctctt tggcactgtg ggggtgcctg
                                                                      780
agcacacata ccgctcccga accaacttca ccagcaaata ccacatgaag gtcctctact
tatccqcctt cactagcaag gacgagggca cctacacgtg tgcactccac cactctggcc
                                                                      840
                                                                      900
attccccacc catctcctcc cagaacgtca cagtgctcag aggtgagaca agcccctaac
                                                                      960
aaqqtcaaqt gagctgggaq agccaggctc ggggacagca ggcagttccc ttggctggac
tagagaggag aatagcccca taacgctctc accctctccc aactgctgcc tggtcaactg
                                                                     1020
                                                                     1080
gggaaccatt gccttcggtg tgaatggggt gaagagctca gggccagaca ggcagagcag
tgtggttcca ccagaactgt gggcaaggcc tttggcccct aatcttcctt ctcccagcgg
                                                                     1140
gaaacaggga tgacaccacc tccctcagcc agttttcttg tcatgatgtt tagtaaggtt
                                                                     1200
ttcataagat gatatgtgtg caagagatca gtaatctgca aatgggaaag atggctggtt
                                                                     1260
                                                                     1320
ctgtgagacc aggctgttcc tggtcccagc taagacattg cagtacccac ctcccaaagg
gagtacaccc ttgctttggg cctgtgcctg cctgagtcct gatccgtctt ccttcctacc
                                                                     1380
ctgccccgg ccccttctc tttctgcaga caaactggtc aagtgtgagg gcatcagcct
                                                                     1440
                                                                     1500
qctqqctcaq aacacctcqt ggctgctgct gctcctgctg tccctctccc tcctccaggc
                                                                     1560
cacggatttc atgtccctgt gactggtggg gcccatggag gagacaggaa gcctcaagtt
                                                                     1620
ccagtgcaga gatcctactt ctctgagtca gctgaccccc tcccccaat ccctcaaacc
ttgaggagaa gtggggaccc cacccctcat caggagttcc agtgctgcat gcgattatct
                                                                     1680
acccacgtcc acgcggccac ctcaccctct ccgcacacct ctggctgtct ttttgtactt
                                                                     1740
                                                                     1800
tttgttccag agctgcttct gtctggttta tttaggtttt atccttcctt ttctttgaga
gttcgtgaag agggaagcca ggattgggga cctgatggag agtgagagca tgtgaggggt
                                                                     1860
agtgggatgg tggggtacca gccactggag gggtcatcct tgcccatcgg gaccagaaac
                                                                     1920
                                                                     1980
ctgggagaga cttggatgag gagtggttgg gctgtgctgg gcctagcacg gacatggtct
                                                                      2040
gtcctgacag cactcctcgg caggcatggc tggtgcctga agaccccaga tgtgagggca
ccaccaagaa tttgtggcct accttgtgag ggagagaact gaggatctcc agcattctca
                                                                      2100
                                                                      2160
gccacaacca aaaaaaaata aaaagggcag ccctccttac cactgtggaa gtccctcaga
                                                                      2220
ggccttgggg catgacccag tgaagatgca ggtttgacca ggaaagcagc gctagtggag
ggttggagaa ggaggtaaag gatgagggtt catcatccct ccctgcctaa ggaagctaaa
                                                                      2280
```

```
agcatggccc tgctgcccct ccctgcctcc acccacagtg gagagggcta caaaggagga
                                                                       2340
caagaccete teaggetgte ceaageteee aagagettee agagetetga ceeacageet
                                                                       2400
ccaagtcagg tggggtggag tcccagagct gcacagggtt tggcccaagt ttctaaggga
                                                                       2460
ggcacttect ecectegeec ateagtgeea geceetgetg getggtgeet gageecetea
                                                                       2520
gacageceee tgeeeegeag geetgeette teagggaett etgeggggee tgaggeaage
                                                                       2580
catggagtga gacccaggag ccggacactt ctcaggaaat ggcttttccc aacccccagc
                                                                       2640
ccccacccgg tggttcttcc tgttctgtga ctgtgtatag tgccaccaca gcttatggca
                                                                       2700
teteattgag gacaaagaaa actgeacaat aaaaceaage etetggaate tgteetegtg
                                                                       2760
tecacetgge ettegeteet ecageagtge etgeetgeec eegett
                                                                       2806
       362
634
DNA
Homo sapiens
<400> 362 cggctgagag gcagcgaact catctttgcc agtacaggag cttgtgccgt ggcccacagc
                                                                         60
ccacagccca cagccatggg ctgggacctg acggtgaaga tgctggcggg caacgaattc
                                                                        120
caggtgtccc tgagcagctc catgtcggtg tcagagctga aggcgcagat cacccagaag
                                                                        180
attggcgtgc acgccttcca gcagcgtctg gctgtccacc cgagcggtgt ggcgctgcag
                                                                        240
gacagggtcc cccttgccag ccagggcctg ggccctggca gcacggtcct gctggtgg
                                                                        300
gacaaatgcg acgaacctct gagcatcctg gtgaggaata acaagggccg cagcagcacc
                                                                        360
tacgaggtcc ggctgacgca gaccgtggcc cacctgaagc agcaagtgag cgggctggag
                                                                       420
ggtgtgcagg acgacctgtt ctggctgacc ttcgagggga agcccctgga ggaccagctc
                                                                       480
ccgctggggg agtacggcct caagcccctg agcaccgtgt tcatgaatct gcgcctgcgg
                                                                        540
ggaggcggca cagagcctgg cgggcggagc taagggcctc caccagcatc cgagcaggat
                                                                       600
caagggccgg aaataaaggc tgttgtaaga gaat
                                                                        634
       363
13500
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 363
aagetteett ettggaatte caaactaata aatgagetaa eteegeecca geeeettagt
                                                                        60
ccctccctgc aatccaccta cctctgcaga catcttcttc caaggaacct tgcttgggaa
                                                                       120
acccacacca gacacatcca tcatggcgtc tacagccgca tgggcgtgcg tccctctgtt
                                                                       180
tatatggcca gagccccgcc tcgctccgcc cctttaaact tggtgggcgg accgaggcgg
                                                                       240
ggctcagacc aggccccacc ccgatcagcc acgtccatcg ccctgatttc caggccctcc
                                                                       300
cagtccctgg gcgcacgtcc cggattcctc ccacgagggg gcgggctgcg gccaaatctc
                                                                       360
ccgccaggtc agcggccggg cgctgattgg ccccatggcg gcggggccgg ctcgtgattg
                                                                       420
gccagcacgc cgtggtttaa agcggtcggc gcgggaccag gggcttactg cgggacggcc
                                                                       480
ttggagagta ctcgggttcg tgaacttccc ggaggcgcaa tgagctgcat taacctgccc
                                                                       540
actgtgctgc ccggctcccc cagcaagacc cgggggcaga tccaggtgcg ggggccagcc
                                                                       600
ctgcgcgtgg ctggggatga ggtggtcgtg gtgatagcct gtgtccaggc atccgcgcag
                                                                       660
ggcgggccct caaatgacct caccttctct cctaggtgat tctcgggccg atgttctcag
                                                                       720
gaaaaaggta atggcttcgc ggggctgggg tggagctcct tcctcttctc cggggacccc
                                                                       780
tigicactae actacactae actacactae actacactae actacactae
                                                                       840
cettecetee cettecette ceetagaagg accageacag cetectacag etecegeeeg
                                                                       900
gggtgctcct cccttgaatt cagtccagga ggaagtctct gccctcttct gcccaggcca
                                                                       960
agecectegt cetgtgtgga egecaetece teetggaget ggtgaeaget gettaeaget
                                                                      1020
tagctgtctt ccccaccaag teetetgaga aggtggcaac cagttgtgtc ccctgtaggc
                                                                      1080
```

caggcctttt	tgtacacccc	tattcaatgt	ggctgtttcc	ttctaaggcc	aaggaaacgt	1140
agtcgctttc	taaaccaagg	agtctgaagc	cgtggagcct	ctgctctcct	gaggtgatag	1200
aaccattccc	tgacccgggt	ggggctagtg	agtttcttga	gtaaactacc	cacgcaccat	1260
tctttttgtt	ttgtttttgt	tcttctagag	gtaggatctt	gctatgttgc	ccaggctggt	1320
ctcaaactcc	tgggctcaag	caattctctc	acctcagcct	cccaagtagc	tgggactaca	1380
ggcgtgcacc	cccccgcct	ccacccagct	aattttattt	tatttttata	gagctggggt	1440
cttgctatgt	tgcccaagct	ggtcttgaac	tcctggtctc	aagcaatcct	cctacttcag	1500
catcccaaag	tgctgggatt	acagatgtta	gccaccatgc	cctgccccaa	cattctttta	1560
tggccctggg	gatcacttca	gctcaaaccc	cttgctcagg	aagatgtggc	tcagagttgg	1620
acttcttgga	cccagaagca	${\tt agtgcttttg}$	acgctgcaca	caaagacttt	ctgaaattaa	1680
tttagaaaag	ctgtatgcca	ggtgtggtgg	cccacgcctt	taatcccagc	gctttggaag	1740
gctgaggtgc	gttgatcact	tgaggttagg	agtttgagac	caccctggtc	aacgtggtga	1800
aaccccatct	ctactgaaaa	aaaaaaccaa	aaattatctg	ggcatggtgg	cagcctcctg	1860
	tactcgggag					1920
	tgagatcgct					1980
	agaaagaaaa	_				2040
ggaatgcagt	cgcaggttcc	ctctacatgt	agcctttgct	tctgccttcc	ccactacatc	2100
	ttactcctcc					2160
ttccccatag	agaattctga	cttccaaccc	tctttgtagg	gatattatac	cctgcctgct	2220
	cttttctggc					2280
	gttggggagg					2340
	ctcttgcagc					2400
agtacaagtg	cctggtgatc	aagtatgcca	aagacactcg	ctacagcagc	agcttctgca	2460
	gtcagtccct					2520
	ttaggactct					2580
	cactttccaa					2640
	ggttctccac					2700
gaagacattt	ctagttgttg	caactggagg	ggggaggga	tgcttttggg	ctttaatgtg	2760
	ggacactgct					2820
	ccccaaatgt					2880
	caggctgcag					2940
	ccgttgttgg					3000
	gctgtttgag		·			3060
	ccttggcagc					3120
	gacttgtcca				=	3180
	agcctcagag					3240
	atccacccgg					3300
	gagtggaggg					3360
	atgctgtctg					3420
	tgtccacggc					3480
	tcgttccagc					3540 3600
	ttctgcccgt					3600 3660
	cagcattgat					3720
	tcactttgtc					3720
	ttcacacatt					3780
	ttgtaaagta					3900
Ciciololyt	cacccaggct	ggagtgcagt	ggcccaacca	cayerracing	ccacycyacc	3300

ccaaaccctt	gggctcaagt	gatcgtccca	cctcagcccc	ctgagcaggt	gggactacag	3960
gcgcacacca	ccacacccag	ttaattttta	cattttttc	acacagtgtc	tcgctgtgtt	4020
acccaggctg	gtctcgaact	cctgagttca	agtgatcctc	ccgtcttggc	ctccccaaag	4080
attacgggca	tgagctgctg	tgtctggcca	gaatacagga	ttttaaaaat	ttatgttttg	4140
caacataatt	aatataaaga	caaatataac	ccaggcccag	ttctagttat	tcattcttct	4200
gaattttaaa	aggaaacatt	tggctggccc	ctaatggtat	catgggccct	ggtacctgat	4260
			aacagtggaa			4320
			caaagcatca			4380
			ggtggatcac			4440
			gtctgctaaa			4500
			ctcttgtggc			4560
			cagggagccg			4620
			ataaaaaata			4680
			ctcaaagccc			4740
			tgccattccc			4800
			ctttctcttc	<del>-</del>		4860
			caggaggccc			4920
			gtcttggcat			4980
			aagttatctg			5040
			accctctgaa			5100
			tttacttttt			5160
			acgatggcac			5220
			cagcctcccg			5280
			tttagtagag			5340
			tgatccgccc			5400
			ggccattgta			5460
			acctgtaatc			5520
gtggacagat	cacttgagcc	caggagttgg	agactcacct	gggcaacata	gtaaaacccc	5580
atctctacca	aaaaaaaaa	gaaattagcc	agtcatagca	gcgcacacct	gtggtccctg	5640
ctactcagga	ggctgaggca	gaaggatgga	gcctgggagg	tcgaggctgc	agtgagtggt	5700
gatagcacca	ctgcactcca	gcccgggcga	caaggccaga	ccctgtctca	aaaaaaaag	5760
ggggaggtgg	ggagtaatgt	ttggtttgcc	tcatggttcc	ttttgcttgt	ttcttatacg	5820
tttattttct	tgttgttgaa	gtaccttttt	tagtagtttt	tgcagccagg	aggtatagat	5880
gggaagctgc	cagtctttgt	atggaaatct	ttcttttgtc	atctagttta	agctgggcag	5940
caagaggtag	gttgatcttg	tgtgggtttg	ggttttttt	tttttttgag	acggagtctt	6000
actctgtcgc	ccaggctgga	gtgcaatggt	gtgatctcgg	ctcactgcaa	cctctgccac	6060
ccggattcaa	gcgattttcc	cacctcgcct	cccaagtagg	tgggattaca	ggcacccacc	6120
atcatgcctg	gctaattttt	gtagagacaa	gggttcacca	tgttggctag	gctggtcttg	6180
aactcctgac	ctcaggtgat	ccacccgcct	tggcttccca	aagtgttgga	attacaggca	6240
tgagccgccg	tgcccggcct	tttttattt	tattttttt	gagatggagt	cttgctctgt	6300
tgccctggct	ggagtggagt	gacgtgatct	tagctcacag	caacctccgc	cttttgggtt	6360
caagcagttc	tgcctcatcc	ttccgggtag	ctgggatcac	aggtgcgtgc	cacatgcgta	6420
mtcatttatg	tatttttaat	agagatgggg	tttcaccatg	ttggccagct	ggtctggaac	6480
			ctcccaaagt			6540
ccacgcctgg	tcttgatctt	gttgctttga	aaagtagcag	cgctggtcat	tgtgtttttg	6600
			tacctctggt			6660
tctcagcaca						6720
gccttttcat	ttctggggaa	ggaatgaagc	cattatcact	tcaggtattt	ctctcctcat	6780

```
ccatctctga ggtgttctgg gttccatctt ccagagtgtg ttttgtttca gtgactattt
                                                                     6840
ttacatctgc tgctctaatt catcatgctc cgttttgttt gacaagttac tgttgggtta
                                                                     6900
tttttaaatt tatgetgtte ettecattat gtteetgaaa atettteet agaettttee
                                                                     6960
agatttttct atttcctcag gaacatattc tgtggttgag tttctgggtt attttctgtt
                                                                     7020
atcttagttt tctttcctct gctttggaga ttttattttt gttagtttat cacaaagaat
                                                                     7080
gaaactgaaa ctctctccaa ggggtttagc agacttgacc tcttaggtac ttttagggtt
                                                                     7140
gcctcgaagt acacaatgtg gtggtttgat ataaacataa caggaattta tttctcgctc
                                                                     7200
acagaccece taegtggtte caggeeggtt gatggggagg eegeeeaega ggeggettag
                                                                     7260
gtcgccctgg ctggctgtat acagacacgg aggggaagag acgtggcgga gcccctgggt
                                                                     7320
gtgaggtttt catgggcctg accagaagct gcaaacgtca cttctgctga tctttcaaag
                                                                     7380
actagaacct gggcacaggg ccacctatac gtttagtata cttagtccag ttcgtttttt
                                                                     7440
gtttgttttt aaaaacagtc ttgctctgtg gcccaggctg gagtgcagtg gcgcagtctc
                                                                     7500
ggctcactat aacctccatg tcccaggttc aagtgattct cccgcctcag cctcctgagt
                                                                     7560
agctgggatt acaggcttct gccaccatgc ccagctaacc ttttgtattt ttagtagaga
                                                                     7620
cggggtttca tcatgttgac cgggctggtc tggaactcct aacctcaggt gatctgcctg
                                                                     7680
cctcagcctc ccaaagtgct gggattacag cgtgagccac cacgcctggc cacacttagt
                                                                     7740
ctagttctat accctggagg aagaataaat gagtttgttt ggtgagtgct tcaaggtctc
                                                                     7800
tacccgccct gcctcccagc acagagccag gccgctctgg cctgaatacc ctgcccggac
                                                                     7860
gtcacagggc ctgtcccctc aaaaggccag tcctgccttc ctggttctgt tcttgcccaa
                                                                     7920
cattetgtat gagteacage tgeaaattee atteeegtgg ggaggetgae gggteeette
                                                                     7980
ccctgtgcgg ggcatctgcc ctgtggagtt gaggctgcca gtgtccgctc tgggttcccg
                                                                     8040
accaccegge agetggeate tecteceege ttgggtatgg ceatteegtt tetgacette
                                                                     8100
agaggtgcgc ccctgagcac ccccatgcct ctgcgtacgt ggagacgtcg ttgttgctgc
                                                                     8160
ecegtgettg agggaeteet ggegagaaag tgageecagg etgggaatag ggetgeaget
                                                                     8220
gttetetttt geteecaaac tgtggeetea gaatgeatee agggattttg cateagettt
                                                                     8280
ggggacatgg ccctctcaga acaaggaagc ttcagctttg gcaaggctct ccctccttca
                                                                     8340
gacctgccgc tgtgagttgt tcaatagete tgtteteetg getetgegta aaccttgttg
                                                                     8400
acagaggetg acceagacce cegaggeaga aacettteee teteettee tegacateea
                                                                     8460
aatgccctga gtcaggagcc agcgtatgaa gtcctgtccc ctgttcagcc tgtaggaggg
                                                                     8520
attteteggt ctactteete eetggeeage aagtaaaaet tgagtteatt eagtgagtat
                                                                     8580
ttattacacc ctacccagac atcagcattc tgccctggcc tctgtgtgcc cttgttctct
                                                                     8640
tcaagaagtt ccgggtcacc agcctgacca acatggagaa actccgtctc tactaaaaat
                                                                     8700
acaaaaatta gccgggcgtg gtggcgcact gcctgtaatc ccagctactt gggaggctga
                                                                     8760
ggcaggagaa tcgcttgaac ccggtaggcg aaggttgcag tgagccaaga tcgccccatt
                                                                     8820
gcactecaag eetgggcaac aacaagagca aaacteagte teaaaacaaa acaaaacaaa
                                                                     8880
agaagttcag ggtcttccca ttgcaagcag ttctagatcg aggagagggg ttcctagcat
                                                                     8940
gggacccagc agaaggactg teettegete etteattgte taegtggaca gtggatgaag
                                                                     9000
ctcagccgaa cctgccttgt tcccgttttc tgggtcagca gggaaagcct ttcacagagt
                                                                     9060
agccaccgtg ccatcctgag gaaggccctg ggtcagaagc ttctgtgctt ctttgtaccc
                                                                     9120
egggcaagac acacaggtgc tcacactgct ctgtagaaac tgttggcatc caagagagac
                                                                     9180
teacetggaa atetetggaa aacetgaage teetagetgg gggtgetgtg etteagatge
                                                                     9240
tggtggtggg tgggcaccct tgcatcaaca gctgcacagt gtgtggtggg cttgcagggt
                                                                     9300
cgcttggcaa tagtaggagc tctgatttat ttttttaaac tttttttctg gctgggcagg
                                                                     9360
tggctcacac ctgtaatccc agcactttgg aaggcctagg cgggcggatc acttgaggtc
                                                                     9420
aggagtttga gaccagccag gccaacatgg tgaaacccca tctctactaa aaatacaaaa
                                                                     9480
attagccaag cgtggtggca cacacctgta attccagcta cttgggaggc agaggcacaa
                                                                     9540
gaattgcttg aacctgggag gcagaggttg cagtgagcca agattatgcc actgcactcc
                                                                     9600
```

agcctggatg	acagagcgag	actctgtctc	aaaaaaata	gacaaagcca	ggcgcagtgg	9660
ctcatgcctg	taatcccaac	actttgggag	gccgaggtgg	gtgaatcacg	aggtcaggag	9720
atcgagacca	tcctggctaa	cacggtgaaa	ccccgtctct	actgaaaata	caaaaaaatt	9780
agccaggcgt	ggtggtgggc	acctgtagtc	tcagctactc	gggaggctga	ggcaggagag	9840
tggcgtgaac	ccaggaggcg	gagcttgcag	tgagctgaga	tcacgccact	gcactccagc	9900
ctgggcgaca	gagcgagact	ccgtctcaaa	aaaaaaaaa	aaatagacct	ttttgtgttt	9960
tctgttctac	tacacaagta	atacaggttg	agtattcctt	aacctaaatg	cctgggacca	10020
gaagtgtttc	ggatttcagg	ttttcgaata	tttgcatgtt	cataatataa	tgagaccttg	10080
ggaatgagcc	ccaagtgtaa	acacaaaatc	catttatgtt	ttatagacat	cttaggcaca	10140
tagcctgaga	gtaattttat	gtatttagta	atttgggcgt	gagccacagt	ttttgactgt	10200
gacctgtccc	atgaggtcag	gtgtggaatt	ttccacttgt	ggtgggcgct	caaaaagttt	10260
cagattttgg	agcctttcag	gttagagaca	tgcaatctat	aataagttta	atctaggaaa	10320
${\tt agttagggtc}$	tggcacagag	gctcacgtct	gtgatcccag	cactttggga	ggctgaggca	10380
ggcagatcac	tggaagtgct	ggacgggtgg	ggaagtgccg	ggtgcaagaa	ccaagctctt	10440
tgactatgga	cctcagcctg	aggttggtca	agaggtggag	tgagtggggg	ctgaggacct	10500
tcatcctgaa	accctgatgc	aggagagtct	ggggtctgcc	ttctaccctc	atgtggcggg	10560
tgaaggagca	aggttctcaa	ctcaggaggg	ttcttcccct	ctccattccc	acccagggga	10620
catctcacaa	caactagaaa	caattttgtc	gcagctgggg	ggtgggaggt	gtgttcctgg	10680
catctatcta	atgggtgggg	gcgagggacg	cagcccaaca	ccctacagtg	cacaggacac	10740
agcgagatcc	ggcctcaaac	tggcagccat	ggcagcgtca	gccctccagg	gggcgcgccc	10800
tggcgcaggt	ggtgtgccgg	cccacagctc	cttgcaggct	gggagctgca	ttttcgtgac	10860
${\tt atgtcatgag}$	tcctcagaga	aaaagaggga	acgagtgcat	ggtggggagg	ggccctggcg	10920
tgctggagtc	tctgggtttc	cttctccaga	gacccctgca	gtcagctgag	cgcaatcagt	10980
cacgttgggc	tttgcttgga	tctcactgga	${\tt atttttcgag}$	ccacccctta	gtcctcacct	11040
tgctaagccc	tcacgtctca	ataacctcaa	acctcagtac	ctgggctgag	aaagcctgag	11100
tggccctggg	agagagaccc	tgcacccaag	gacaaggaca	tccctgcttc	acccaaccca	11160
aaggccagtc	tggacatatg	aactcaacca	gctaagagtg	atatgattga	ttgatgagaa	11220
tcaccagage	acttgccaga	gtttcagctt	ctccctgggc	caaagtgaag	tttgctttac	11280
acagtaaatg	tgctctgtgc	aggtcctgaa	tttagaaggc	tgtgctgtgt	catcctgctc	11340
tgtaaatggc	cagtaggacc	cccgcccctt	ctcaaggcac	attacccgtt	taaaacgggg	11400
	cacaaagcgc					11460
tccatcctta	aacaacagga	ccttccttgc	tcttacggaa	aaggaaacag	gttcagagac	11520
gttaattcat	tgccaaggtc	acacagataa	tgggtccagc	gaagagtggt	gtccgagccc	11580
	gcctttggcc					11640
	gggtacctgg					11700
	tacctgtcgt					11760
	tgggagaatt					11820
	tcgctggggc					11880
	ccctttccag					11940
	cgtaattgtg					12000
	ctggagctgg					12060
	ggtgaccagg			<del>-</del>		12120
	agggactcca					12180
	caaagggaca					12240
	aactctcctg					12300
	ggtgctgagc					12360
	ggtgccgctg					12420
gcttccggga	agccgcctat	accaagaggc	tcggcacaga	gaaggaggta	gctccacctg	12480

```
cettecetge aggeeggegg ggtgggggta tggetetgee teetteetgt cetggeeett
                                                                    12540
cacccatece etgteeetge ggecaggteg aggtgattgg gggageagae aagtaccaet
                                                                     12600
ccgtgtgtcg gctctgctac ttcaagaagg cctcaggcca gcctgccggg ccggacaaca
                                                                     12660
aagagaactg cccagtgcca ggaaagccag gggaagccgt ggctgccagg aagctctttq
                                                                     12720
ecceacagea gattetgeaa tgeageeetg ecaaetgagg gacetgeaag ggeegeeege
                                                                     12780
tecetteetg ceaetgeege ctactggaeg etgeeetgea tgetgeecag ceaetecagg
                                                                     12840
aggaagtcgg gaggcgtgga gggtgaccac accttggcct tctgggaact ctcctttgtg
                                                                     12900
tggctgcccc acctgccgca tgctccctcc tctcctaccc actggtctgc ttaaagcttc
                                                                     12960
ecteteaget getgggaega tegeceagge tggagetgge eeegettggt ggeetgggat
                                                                     13020
etggcacact cecteteett ggggtgaggg acagageece acgetgttga catcageetg
                                                                     13080
ettetteece tetgeggett teaetgetga gtttetgtte teeetgggaa geetgtgeea
                                                                     13140
gcacctttga gccttggccc acactgaggc ttaggcctct ctgcctggga tgggctccca
                                                                     13200
ecctecett aggatggeet ggatteaege ectettgttt eettttggge teaaageeet
                                                                     13260
tectacetet ggtgatggtt tecacaggaa caacagcate tttcaccaag atgggtggca
                                                                    13320
ccaaccttgc tgggacttgg atcccagggg cttatctctt caagtgtgga gagggcaggg
                                                                    13380
tecaegeete tgetgtaget tatgaaatta aetaattgaa aatteaetgg ttggtggaeg
                                                                    13440
cacatttctc tttcacctgg gtttccctgg gtctcatgga cagctccaac ttgatttggg
                                                                    13500
       364
2206
DNA
Homo sapiens
<400> 364 ctagtctttc agccttcagg ctgtttttgg cttgaagctc tcttggcctc ctagtttcta
                                                                        60
cctaatcatg tccctggtgg aggccatcag cctctggaat gaaggggtgc tggcagcgga
                                                                       120
caagaaggac tggaagggag ccctggatgc cttcagtgcc gtccaggacc cccactcccg
                                                                       180
gatttgette aacattgget geatgtacae tateetgaag aacatgaetg aagcagagaa
                                                                       240
ggcctttacc agaagcatta accgagacaa gcacttggca gtggcttact tccaacgagg
                                                                       300
gatgctctac taccagacag agaaatatga tttggctatc aaagacctta aagaagcctt
                                                                       360
gattcagctt cgagggaacc agctgataga ctataagatc ctggggctcc agttcaagct
                                                                       420
gtttgcctgt gaggtgttat ataacattgc tttcatgtat gccaagaagg aggaatggaa
                                                                       480
aaaagctgaa gaacagttag cattggccac gagcatgaag tctgagccca gacattccaa
                                                                       540
aatcgacaag gcgatggagt gtgtctggaa gcagaagcta tatgagccag tggtgatccc
                                                                       600
tgtgggcaag ctgtttcgac caaatgagag acaagtggct cagctggcca agaaggatta
                                                                       660
cctaggcaag gcgacggtcg tggcatctgt ggtggatcaa gacagtttct ctgggtttgc
                                                                      720
ccctctgcaa ccacaggcag ctgagcctcc acccagaccg aaaaccccag agatcttcag
                                                                       780
ggctctggaa ggggaggctc accgtgtgct atttgggttt gtgcctgaga caaaagaaga
                                                                      840
getecaggte atgecaggga acattgtett tgtettgaag aagggeaatg ataactggge
                                                                      900
cacggtcatg ttcaacgggc agaaggggct tgttccctgc aactaccttg aaccagttga
                                                                      960
gttgcggatc caccctcagc agcagcccca ggaggaaagc tctccgcagt ccgacatccc
                                                                     1020
agetectect agttecaaag eecetggaaa acceeagetg teaceaggee agaaacaaaa
                                                                     1080
agaagagcct aaggaagtga agctcagtgt tcccatgccc tacacactca aggtgcacta
                                                                     1140
caagtacacg gtagtcatga agactcagcc cgggctcccc tacagccagg tccgggacat
                                                                     1200
ggtgtctaag aaactggagc tccggctgga acacactaag ctgagctatc ggcctcggga
                                                                     1260
cagcaatgag ctggtgcccc tttcagaaga cagcatgaag gatgcctggg gccaggtgaa
                                                                     1320
aaactactgc ctgactctgt ggtgtgagaa cacagtgggt gaccaaggct ttccagatga
                                                                     1380
acccaaggaa agtgaaaaag ctgatgctaa taaccagaca acagaacctc agcttaagaa
                                                                     1440
aggcagecaa gtggaggcac tetteagtta tgaggetace caaccagagg acetggagtt
                                                                     1500
tcaggaaggg gatataatcc tggtgttatc aaaggtgaat gaagaatggc tggaagggga
                                                                     1560
gtgcaaaggg aaggtgggca ttttccccaa agtttttgtt gaagactgcg caactacaga
                                                                     1620
```

```
tttggaaagc actcggagag aagtctagga tgtttcacaa actacaaagc tgaagaaaat
                                                                      1680
gaagccctat tacttgtttg taagatttag cacccttctg ctgtatactg tactgagaca
                                                                      1740
ttacagtttg gaagtgttaa ctatttattc cctgttaaaa tttaacctac tagacaatga
                                                                      1800
tgtgagtacc caggatgatt tcctggggca cagtgggtga ggagatgggg acaggtgaat
                                                                      1860
ggaggagtta ggggagagga aaagtggatg gaagtgtctg gaaagggcac gagagagtct
                                                                      1920
tccaggtact gatcctgttt cttgctctga gtgctagcta gccagctgtg ttcacactgt
                                                                      1980
aaacattcat caagctgtac atttggtgca cttttctgtg tcataccaca ataaaaaaaa
                                                                      2040
acctatcatc atcttacaaa aacaagacac ccaagtccag gcccaaggag taagtacaaa
                                                                      2100
tattcctgtt tctgaaccat tactgtaatt ggctcttaag gcttgaagta accttatagg
                                                                      2160
ttactcataa ggcatataca aataaacttg tttgttttct tttttc
                                                                      2206
       365
1539
       DNA
Homo sapiens
<400> 365
gaattcgggg ggaggggca gtgtcctccg agccaggaca ggcatgttgt tgggactggc
                                                                        60
ggccatggag ctgaaggtgt gggtggatgg catccagcgt gtggtctgtg gggtctcaga
                                                                       120
gcagaccacc tgccaggaag tggtcatcgc actagcccaa gcaataggcc agactggccg
                                                                       180
ctttgtgctt gtgcagcggc ttcgggagaa ggagcggcag ttgctgccac aagagtgtcc
                                                                       240
agtgggcgcc caggccacct gcggacagtt tgccagcgat gtccagtttg tcctgaggcg
                                                                       300
cacagggccc agcctagctg ggaggccctc ctcagacagc tgtccacccc cggaacgctg
                                                                       360
cctaattcgt gccagcctcc ctgtaaagcc acgggctgcg ctgggctgtg agccccgcaa
                                                                       420
aacactgacc cccgagccag cccccagcct ctcacgccct gggcctgcgg cccctgtgac
                                                                       480
acccacacca ggctgctgca cagacctgcg gggcctggag ctcagggtgc agaggaatgc
                                                                       540
tgaggagetg ggecatgagg cettetggga geaagagetg egeegggage aggeeeggga
                                                                       600
gcgagaggga caggcacgcc tgcaggcact aagtgcggcc actgctgagc atgccgcccg
                                                                       660
gctgcaggcc ctggacgctc aggcccgtgc cctggaggct gagctgcagc tggcagcgga
                                                                       720
ggcccctggg ccccctcac ctatggcatc tgccactgag cgcctgcacc aggacctggc
                                                                       780
tgttcaggag cggcagattg cggaggtgca gggcagcctg gctctggtga gccgggccct
                                                                       840
ggaggcagca gagcgagcct tgcaggctca ggctcaggag ctggaggagc tgaaccgaga
                                                                       900
gctccgtcag tgcaacctgc agcagttcat ccagcagacc ggggctgcgc tgccaccgcc
                                                                       960
cccacggcct gacaggggcc ctcctggcac tcagggccct ctgcctccag ccagagagga
                                                                      1020
gtccctcctg ggcgctccct ctgagtccca tgctggtgcc cagcctaggc cccgaggtgg
                                                                      1080
cccccatgac gcagaactcc tggaggtagc agcagctcct gccccagagt ggtgtcctct
                                                                      1140
ggcagcccag ccccaggctc tgtgacagcc tagtgagggc tgcaagacca tcctgcccgg
                                                                      1200
accacagaag gagagttggc ggtcacagag ggctcctctg ccaggcagtg ggaagccctg
                                                                      1260
ggtttggcct caggagctgg gggtgcagtg ggggactgcc ctagtccttg ccaggtcgcc
                                                                      1320
cagcaccctg gagaagcatg gggcgtagcc agctcggaac ttgccaggcc ccaaaggcca
                                                                      1380
cgactgcctg ttggggacag gagatgcatg gacagtgtgc tcaagctgtg ggcatgtgct
                                                                      1440
tgcctgcggg agaggtcctt cactgtgtgt acacagcaag agcatgtgtg tgccacttcc
                                                                      1500
cctaccccaa cgtgaaaacc tcaataaact gcccgaagc
                                                                      1539
       366
1424
DNA
Homo sapiens
<400> 366
aggagcctta ggaggtacgg ggagctcgca aatactcctt ttggtttatt cttaccacct
                                                                        60
tgcttctgtg ttccttggga atgctgctgt gcttatgcat ctggtctctt tttggagcta
                                                                       120
cagtggacag gcatttgtga cagcactatg ggactgagta acattctctt tgtgatgqcc
                                                                       180
tteetgetet etggtgetge teetetgaag atteaagett attteaatga gaetgeagae
                                                                       240
```

```
ctgccatgcc aatttgcaaa ctctcaaaac caaagcctga gtgagctagt agtattttqq
                                                                     300
caggaccagg aaaacttggt tctgaatgag gtatacttag gcaaagagaa atttqacaqt
                                                                     360
gttcattcca agtatatggg ccgcacaagt tttgattcgg acagttggac cctgagactt
                                                                     420
cacaatcttc agatcaagga caagggcttg tatcaatgta tcatccatca caaaaagccc
                                                                     480
acaggaatga ttcgcatcca ccagatgaat tctgaactgt cagtgcttgc taacttcagt
                                                                     540
caacctgaaa tagtaccaat ttctaatata acagaaaatg tgtacataaa tttgacctgc
                                                                     600
tcatctatac acggttaccc agaacctaag aagatgagtg ttttgctaag aaccaagaat
                                                                     660
tcaactatcg agtatgatgg tattatgcag aaatctcaag ataatgtcac agaactgtac
                                                                     720
gacgtttcca tcagcttgtc tgtttcattc cctgatgtta cgagcaatat gaccatcttc
                                                                     780
tgtattctgg aaactgacaa gacgcggctt ttatcttcac ctttctctat agagcttgag
                                                                     840
gaccctcagc ctcccccaga ccacattcct tggattacag ctgtacttcc aacagttatt
                                                                     900
atatgtgtga tggttttctg tctaattcta tggaaatgga agaagaagaa gcggcctcgc
                                                                     960
aactcttata aatgtggaac caacacaatg gagagggaag agagtgaaca gaccaagaaa
                                                                    1020
agagaaaaaa tccatatacc tgaaagatct gatgaagccc agcgtgtttt taaaagttcg
                                                                    1080
aagacatctt catgcgacaa aagtgataca tgtttttaat taaagagtaa agcccataca
                                                                    1140
agtattcatt ttttctaccc tttcctttgt aagttcctgg gcaacctttt tgatttcttc
                                                                    1200
cagaaggcaa aaagacatta ccatgagtaa taagggggct ccaggactcc ctctaaqtqq
                                                                    1260
aatagcctcc ctgtaactcc agctctgctc cgtatgccaa gaggagactt taattctctt
                                                                    1320
actgcttctt ttcacttcag agcacactta tgggccaagc ccagcttaat ggctcatgac
                                                                    1380
1424
       367
2814
DNA
Homo sapiens
<400> 367 aagaacgccc ccaaaatctg tttctaattt tacagaaatc ttttgaaact tggcacggta
                                                                      60
ttcaaaagtc cgtggaaaga aaaaaacctt gtcctggctt cagcttccaa ctacaaagac
                                                                     120
agacttggtc cttttcaacg gttttcacag atccagtgac ccacgctctg aagacagaat
                                                                     180
tagctaactt tcaaaaacat ctggaaaaat gaagacttgg gtaaaaatcg tatttggagt
                                                                     240
tgccacctct gctgtgcttg ccttattggt gatgtgcatt gtcttacgcc cttcaagagt
                                                                     300
tcataactct gaagaaaata caatgagagc actcacactg aaggatattt taaatggaac
                                                                     360
attttcttat aaaacatttt ttccaaactg gatttcagga caagaatatc ttcatcaatc
                                                                     420
tgcagataac aatatagtac tttataatat tgaaacagga caatcatata ccattttqaq
                                                                     480
taatagaacc atgaaaagtg tgaatgcttc aaattacggc ttatcacctg atcggcaatt
                                                                     540
tgtatatcta gaaagtgatt attcaaagct ttggagatac tcttacacag caacatatta
                                                                     600
catctatgac cttagcaatg gagaatttgt aagaggaaat gagcttcctc gtccaattca
                                                                     660
gtatttatgc tggtcgcctg ttgggagtaa attagcatat gtctatcaaa acaatatcta
                                                                     720
tttgaaacaa agaccaggag atccaccttt tcaaataaca tttaatggaa gagaaaataa
                                                                     780
aatatttaat ggaatcccag actgggttta tgaagaggaa atgcttccta caaaatatqc
                                                                     840
tctctggtgg tctcctaatg gaaaattttt ggcatatgcg gaatttaatg ataaggatat
                                                                     900
accagttatt gcctattcct attatggcga tgaacaatat cctagaacaa taaatattcc
                                                                     960
atacccaaag gctggagcta agaatcccgt tgttcggata tttattatcg ataccactta
                                                                    1020
ccctgcgtat gtaggtcccc aggaagtgcc tgttccagca atgatagcct caagtgatta
                                                                    1080
ttatttcagt tggctcacgt gggttactga tgaacgagta tgtttgcagt ggctaaaaag
                                                                    1140
agtccagaat gtttcggtcc tgtctatatg tgacttcagg gaagactggc agacatggga
                                                                    1200
ttgtccaaag acccaggagc atatagaaga aagcagaact ggatgggctg gtggattctt
                                                                    1260
tgtttcaaga ccagttttca gctatgatgc catttcgtac tacaaaatat ttagtgacaa
                                                                    1320
ggatggctac aaacatattc actatatcaa agacactgtg gaaaatgcta ttcaaattac
                                                                    1380
aagtggcaag tgggaggcca taaatatatt cagagtaaca caggattcac tgttttattc
                                                                    1440
```

```
tagcaatgaa tttgaagaat accctggaag aagaaacatc tacagaatta gcattggaag
                                                                    1500
ctatcctcca agcaagaagt gtgttacttg ccatctaagg aaagaaaggt gccaatatta
                                                                    1560
cacagcaagt ttcagcgact acgccaagta ctatgcactt gtctgctacg gcccagqcat
                                                                    1620
ccccatttcc accettcatg atggacgcac tgatcaagaa attaaaatcc tggaagaaaa
                                                                    1680
caaggaattg gaaaatgett tgaaaaatat ccagetgeet aaagaggaaa ttaagaaact
                                                                    1740
tgaagtagat gaaattactt tatggtacaa gatgattett eeteeteaat ttgacagate
                                                                    1800
aaagaagtat cccttgctaa ttcaagtgta tggtggtccc tgcagtcaga gtgtaaggtc
                                                                    1860
tgtatttgct gttaattgga tatcttatct tgcaagtaag gaagggatgg tcattgcctt
                                                                    1920
ggtggatggt cgaggaacag ctttccaagg tgacaaactc ctctatgcag tgtatcgaaa
                                                                    1980
gctgggtgtt tatgaagttg aagaccagat tacagctgtc agaaaattca tagaaatggg
                                                                    2040
tttcattgat gaaaaaagaa tagccatatg gggctggtcc tatggaggat acgtttcatc
                                                                    2100
actggccctt gcatctggaa ctggtctttt caaatgtggt atagcagtgg ctccagtctc
                                                                    2160
cagctgggaa tattacgcgt ctgtctacac agagagattc atgggtctcc caacaaagga
                                                                    2220
tgataatett gageaetata agaatteaae tgtgatggea agageagaat attteagaaa
                                                                    2280
tgtagactat cttctcatcc acggaacagc agatgataat gtgcactttc aaaactcagc
                                                                    2340
acagattgct aaagctctgg ttaatgcaca agtggatttc caggcaatgt ggtactctga
                                                                    2400
ccagaaccac ggcttatccg gcctgtccac gaaccactta tacacccaca tgacccactt
                                                                    2460
cctaaagcag tgtttctctt tgtcagacta aaaacgatgc agatgcaagc ctgtatcaga
                                                                    2520
atctgaaaac cttatataaa cccctcagac agtttgctta ttttattttt tatqttqtaa
                                                                    2580
aatgctagta taaacaaaca aattaatgtt gttctaaagg ctgttaaaaa aaagatgagg
                                                                    2640
actcagaagt tcaagctaaa tattgtttac attttctggt actctgtgaa agaagagaaa
                                                                    2700
agggagtcat gcattttgct ttggacacag tgttttatca cctgttcatt tgaagaaaaa
                                                                    2760
2814
       DNA
Homo sapiens
<400> 368 ggggaagtgt gggctgggca gtggcagaaa cctgatgaca caatctcgcc
                                                                      60
gcctccctgt gttggtggag gatgtctgca gcagcattta aattctggga gggcttggtt
                                                                     120
gtcagcagca gcaggaggag gcagagacag catcgtcggg accagactcg tctcaggcca
                                                                     180
gttgcagcct tctcagccaa acgccgacca aggtacagct tcagtttgct actgggttgt
                                                                     240
gcattcagct gaatttcatg gggaagtcca aattctaagg aaaaaaatgt ggtagtataa
                                                                     300
aaaggtatca ctgttgtaac ctatgaagat gtcagctatt cctttgaaat attttgcagg
                                                                     360
aaaactcact accatgagaa ttgcagtgat ttgcttttgc ctcctaggca tcacctgtgc
                                                                     420
cataccagtg agtacagttg catcttaaag aaaattcctg aaaataactg aattgtgtgc
                                                                     480
ttccatgtgc taggaggaca ttcttgtaat ctttcttcat cttttctgtt tctaaggtta
                                                                     540
aacaggctga ttctggaagt tctgaggaaa agcaggtaag catcttttat gtttttatat
                                                                     600
agttaaatca tttactcaat tatggcgaga ggtgcaagaa acgtatttgc tgcgatcaaa
                                                                    660
tgagttcata tttgtaaagc aatttgaaag agtgcctagc ccacagtaag tgctacataa
                                                                    720
gagtttgtta aatgaatctg caaaaaaaaa aaaaattaca aaaaggtacc taagggtccq
                                                                    780
ggtgactata tgcttccatc aagactagtg aagaatggtt gttttttcca ttcatcccta
                                                                    840
cattlettt tttaataatg ataaacatgc aacttttttg tagetttaca acaaatacce
                                                                    900
agatgctgtg gccacatggc taaaccctga cccatctcag aagcagaatc tcctagcccc
                                                                    960
acaggtattt ttaaacttct cataattaaa ctacagtgat gaaagatagc cacactcagg
                                                                   1020
ccatttgggc tgctcagatg aatcctgccc tgcctgctgg caaacatgtg cttaggacat
                                                                   1080
tgactgatct gccatgttgg cttctctctg tgttaagcca tccacagatg aggctgaaaa
                                                                   1140
ataaaaactg ctttggatta aaaaggttaa cttttgaata aaaaagctag gcatgtgtga
                                                                   1200
tgcgcactaa cacgtgccat tccttcttca gaatgctgtg tcctctgaag aaaccaatga
                                                                   1260
```

```
ctttaaacaa gaggtaagtt ctcattttca atcagaggcc catcatgcct tgaagagatg
                                                                    1320
aaagaaggca ttgcctggat tctcttctga tgaaatttca ttagcaagtt ttccagctaa
                                                                    1380
ttggcagtct aaaacttgct cataaataaa acatgtattt actaaatatc agaaatacta
                                                                    1440
ggtttcctcg gataacctaa aagccatggt atgtactgtg aatgcaaaga ttctgaaact
                                                                    1500
aaataaaaag aaagatagta aaagactaat gtgctataaa ggctaaggga aaataaaaaac
                                                                    1560
ccatatatta attttcccgg ccatcttaat tttcagaccc ttccaagtaa gtccaacgaa
                                                                    1620
agccatgacc acatggatga tatggatgat gaagatgatg atgaccatgt ggacagccag
                                                                    1680
gactccattg actcgaacga ctctgatgat gtagatgaca ctgatgattc tcaccagtct
                                                                    1740
gatgagtete accattetga tgaatetgat gaactggtea etgattttee caeggaeetg
                                                                    1800
ccagcaaccg aagttttcac tccagttgtc cccacagtag acacatatga tggccgaggt
                                                                    1860
gatagtgtgg tttatggact gaggtcaaaa tctaagaagt ttcgcagacc tgacatccag
                                                                    1920
gtaaateett taacagacac acetgatggt tetgactage getcaagtet aggaaaceae
                                                                    1980
agtttgcata ttcattcatt cattcatcca ttcattcatc cattcagcaa gaattcattc
                                                                    2040
atattctact ttatgaccat tgaatacaaa tctttttctg cttggcggtt tttgtaagtc
                                                                    2100
tacataattt ctctctagat ttgattctca aacacaattc tactttttga aatcctggat
                                                                    2160
caaagtaaca tgctagtatt atttcagcca gatttagaca atttttagta taagatgacc
                                                                    2220
taaaagctag agagtggaaa aggattacca tattcccatc cctagccgtt catataatta
                                                                    2280
ttcttcattt gtgccgtgat tcagtaccct gatgctacag acgaggacat cacctcacac
                                                                    2340
atggaaagcg aggagttgaa tggtgcatac aaggccatcc ccgttgccca ggacctgaac
                                                                    2400
gcgccttctg attgggacag ccgtgggaag gacagttatg aaacgagtca gctggatgac
                                                                    2460
cagagtgctg aaacccacag ccacaagcag tccagattat ataagcggaa agccaatgat
                                                                    2520
gagagcaatg agcattccga tgtgattgat agtcaggaac tttccaaagt cagccgtgaa
                                                                    2580
ttccacagcc atgaatttca cagccatgaa gatatgctgg ttgtagaccc caaaagtaag
                                                                    2640
gaagaagata aacacctgaa atttcgtatt tctcatgaat tagatagtgc atcttctgag
                                                                    2700
gtcaattaaa aggagaaaaa atacaatttc tcactttgca tttagtcaaa agaaaaaatg
                                                                    2760
ctttatagca aaatgaaaga gaacatgaaa tgcttctttc tcagtttatt ggttgaatgt
                                                                    2820
2880
atggaaactc cctgtaaaca aaagcttcag ggttatgtct atgttcattc tatagaagaa
                                                                    2940
atgcaaacta tcactgtatt ttaatatttg ttattctctc atgaatagaa atttatgtag
                                                                   3000
aagcaaacaa aatactttta cccacttaaa aagagaatat aacattttat gtcactataa
                                                                   3060
tcttttgttt tttaagttag tgtatatttt gttgtgatta tcttttgtgg tgtgaataaa
                                                                   3120
tcttttatct tgaatgtaat aag
                                                                   3143
      ĎŇÁ
Homo sapiens
gcggcggtgg cggaggcgga cacattggcg tgagacctgg gagtacgttg tgccaaatca
                                                                     60
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg
                                                                    120
aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa
                                                                    180
tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa
                                                                    240
ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt
                                                                    300
ctagtgcttc caaggttaca cttccagaaa tgtctttttt ttttcacact aaaaaaaaa
                                                                    360
aaaagaatca gctgtaaaaa ggcatgtaag gctgtaactc aaggaaagat ctggcaagca
                                                                    420
gccctgtgat agtaaattat ggtcgtgttc agggaatgct ttccagcaat tcagtagaca
                                                                    480
gtgctcagct gcaatgcaaa agcccaggtc cttgtctttg tctgccactg gcctctcatg
                                                                    540
ceteagttte eccatetgtg aaacaatggg gattggacca aatatetgaa ateccatggt
                                                                    600
tataggeett caggattace tgetgeattt gtgetaaagt ttgeeactgt tteteactgt
                                                                    660
cagctgttgt aataacaagg attttctttt gttttaaatg taggttttgg cccgaaccgc
                                                                    720
```

```
gacttcaaca aaaaataaga gaagaaagga atattttcta gctgtgcaaa tcctctccct
                                                                      780
agaggaaaag ttaattgttg tgttgtttta atactgtttt ttcccgtgta gatttctgat
                                                                      840
acttcaatcc cctactcccc caaaacagtt gaagcccagc ccactcttaa tgggcttatt
                                                                      900
caccatttgt gtaattcatt aatgctcata ataacctcat gagaaagcaa ctagtttgat
                                                                      960
tttatgtcag tttggaagct gaagatccaa acgaggcatt ctgtgagatc tatggagaga
                                                                      1020
ttggtacaaa cactgaatac atgtaaatta tactcagggt agaccctatt tgtggttaaa
                                                                      1080
atagggatat ttcctttttt tttttttttt ttttgactgt ttcttaatca gtgccatgcc
                                                                      1140
aggaaaatag ggatgtttcc ttcccagaga tctgtgtgtc ttttttcaga aacgtctgtg
                                                                      1200
acaggcccat caattttgaa atatttggtt tttgagcctg tcactctaaa ccagcgttta
                                                                      1260
acgttcaaaa ggcaaataac tgatgaccag gcggcacatt gttctgctcc gtgagtgtct
                                                                      1320
ggcactggga aaggtgtaga ttgtctagaa tgacagcaat tccgacgccc cagtcagtcc
                                                                      1380
tgcgtgattg tggcgagggc gcgtctggca ccgggaaggt gtagatcatc tagaatgacg
                                                                      1440
gcgattecga cgccccggtc agtectgcgt gattggcgag ggtgcatetg tegtgagaat
                                                                      1500
teccagttet gaagagagea aggagaetga tecegegtag tecaaggeat tggeteeect
                                                                      1560
gttgctcttc cttgtggagc tececetgec ceaetecete etgeetgeat etteagaget
                                                                      1620
gcctctgaag ctcgcttggt ccctagctca cactttccct gcggctggga aggtaattga
                                                                      1680
atactcgagt ttaaaaggaa agcacatcct tttaaaccaa aacacacctg ctgggctgta
                                                                      1740
aacagetttt agtgacatta ecatetaete tgaaaateta acaaaggagt gatttgtgea
                                                                      1800
gttgaaagta ggatttgctt cataaaagtc acaatttgaa ttcatttttg cttttaaatc
                                                                      1860
cagccaacct tttctgtctt aaaaggaaaa aaaaaa
                                                                      1896
       370
2827
DNA
Homo sapiens
<400> 370
tggcgatgct actgtttaat tgcaggaggt gggggtgtgt gtaccatgta ccagggctat
                                                                       60
tagaagcaag aaggaaggag ggagggcaga gcgccctgct gagcaacaaa ggactcctgc
                                                                      120
agcettetet gtetgtetet tggeacagge acatggggag geeteeegea ggtgggggge
                                                                      180
caccagteca ggggtgggag cactacaggg cacgagttgg tttgggaget gccagtetec
                                                                      240
tgggaggatc gcagtcagca gagcagggct gaggcctggg ggtaggagca gagcctgcgc
                                                                      300
atctggaggc agcatgtcca agaaagggag tggaggtgca gcgaaggacc caggggcaga
                                                                      360
gcccacgctg gggatggacc ccttcgagga cacactgcgg cggctgcgtg aggccttcaa
                                                                      420
ctgagggcgc acgcggccgg ccgagttccg ggctgcgcag ctccagggcc tgggccactt
                                                                      480
ccttcaagaa aacaagcagc ttctgcgcga cgtgctggcc caggacctgc ataagccagc
                                                                      540
tttcgaggca gacatatetg ageteateet ttgecagaae gaggttgaet aegeteteaa
                                                                      600
gaaccttcag gcctggatga aggatgaacc acggtccacg aacctgttca tgaagctgga
                                                                      660
ctcggtcttc atctggaagg aaccetttgg cctggtcctc atcatcgcac cctggaacta
                                                                      720
eccattgaac etgaceetgg tgeteetggt gggcaeeete eeegeaggga attgegtggt
                                                                      780
gctgaagccg tcagaaatca gccagggcac agagaaggtc ctggctgagg tgctgcccca
                                                                      840
gtacctggac cagagetget ttgccgtggt getgggegga ceccaggaga cagggeaget
                                                                      900
gctagagcac aagttggact acatcttctt cacagggagc cctcgtgtgg gcaaqattqt
                                                                      960
catgactgct gccaccaagc acctgacgcc tgtcaccctg gagctggggg gcaagaaccc
                                                                     1020
ctgctacgtg gacgacaact gcgaccccca gaccgtggcc aaccgcgtgg cctggttctg
                                                                     1080
ctacttcaat gccggccaga cctgcgtggc ccctgactac gtcctgtgca gccccgagat
                                                                     1140
gcaggagagg ctgctgcccg ccctgcagag caccatcacc cgtttctatg gcgacgaccc
                                                                     1200
ccagagetee ccaaacetgg geegeateat caaceagaaa cagtteeage ggetgeggge
                                                                     1260
attgctgggc tgcggccgcg tggccattgg gggccagagc aacgagagcg atcgctacat
                                                                     1320
egeceeeacg gtgetggtgg acgtgcagga gacggageet gtgatgcagg aggagatett
                                                                     1380
egggeeeate etgeeeateg tgaaegtgea gagegtggae gaggeeatea agtteateaa
                                                                     1440
```

```
ccggcaggag aagcccctgg ccctgtacgc cttctccaac agcagacagg ttgtgaacca
                                                                   1500
gatgctggag cggaccagca gcggcagctt tggaggcaat gagggcttca cctacatatc
                                                                   1560
tetgetgtee gtgecatteg ggggagtegg ceacagtggg atgggeeggt accaeggeaa
                                                                    1620
gttcaccttc gacaccttct cccaccaccg cacctgcctg ctcgccccct ccggcctgga
                                                                    1680
gaaattaaag gagatccgct acccacccta taccgactgg aaccagcagc tgttacgctg
                                                                    1740
gggcatgggc tcccagagct gcaccctcct gtgagcgtcc cacccgcctc caacgggtca
                                                                    1800
cacagagaaa cctgagtcta gccatgaggg gcttatgctc ccaactcaca ttgttcctcc
                                                                    1860
agaccgcagg ctcccccagc ctcaggttgc tggagctgtc acatgactgc atcctgcctg
                                                                   1920
ccagggctgc aaagcaaggt cttgcttcta tctgggggac gctgctcgag agaggccgag
                                                                   1980
2040
ccctctcggt cagggttggc caggcccagt cacaggggca gtgtcaccct ggaaaataca
                                                                    2100
gtgccctgcc ttcttagggg catcagccct gaacggttga gagcgtggag ccctccaggc
                                                                    2160
etttgetete ceetetagge acaegegeae ttecaeetet geeceateee aaetgeaeea
                                                                    2220
geactgeete ecceagggat ceteteacat eccaeactgg tetetgeace acceetetgg
                                                                    2280
ttcacaccgc accetgcact cacceacage agetecatee actgggaaaa etggggtttg
                                                                   2340
catcactcca ctgcacagtg ttagtgggac ctgggggcaa gtcccttgac ttctctgagc
                                                                   2400
ctcagtttcc ttatgtgaaa gttgctggaa ccaaaatgga gtcacttatg ccaaactcta
                                                                    2460
ataaaatgga gtcggggggg cacatagaag ccctcacaca cacatgcccg taacaggatt
                                                                    2520
tatcaccaag acacgeetge atgtaagace agacacaggg egtatggaaa agcaegteet
                                                                    2580
caaagactgt agtattccag atgagctgca gatgcttacc taccacggcc gtctccacca
                                                                    2640
gaaaaccatc gccaactcct gcgatcagct tgtgacttac aaaccttgtt taaaagctgc
                                                                   2700
ttacatggac ttctgtcctt taaaacgttc cccttggctg tggccctctg tgtatgcctg
                                                                   2760
ggateettee aageaeteat ageeeagata ggaateetet geteeteeea aataaattea
                                                                   2820
tctgttc
                                                                   2827
       ĎNA
Homo sapiens
<400> 371 egeggaatte egegeegeeg eegeeggeag acceegeget eeggeteegg
                                                                     60
ctcggctcgc tcggctccgg tgcgcgccga ggccatgcag cgccggggcg ccctgttcgg
                                                                    120
catgccgggc ggcagcggag gcaggaagat ggctgcagga gacatcggcg agctgctagt
                                                                    180
gccccacatg cccacgatcc gcgtgcccag gtccggcgac agggtctaca agaacgagtg
                                                                    240
egeettetee taegaetete eeaattetga aggtggaete tatgtatgea tgaataeatt
                                                                    300
tttggccttt ggaagggaac atgttgaaag acattttcga aaaactggac agagtgtata
                                                                    360
catgcacctg aaaagacatg cgcgagagaa ggtaagaggg gcgtctggtg gagcgttacc
                                                                    420
aaaaaggagg aattccaaga tttttttaga tctagatact gatgacgatt taaatagcga
                                                                    480
cgattatgaa tatgaagatg aagccaaact tgttatattc ccagatcact atgaaatagc
                                                                    540
actaccaaat attgaggagt taccagccct ggtaacaatt gcttgtgatg cagttctcag
                                                                    600
ctcaaaatct ccatacagaa agcaggaccc agacacgtgg gaaaatgaat tgccagtatc
                                                                    660
taaatatgcc aacaacctca cccagctgga caatggagtc aggattcctc caagtggttg
                                                                    720
gaagtgtgcc agatgcgacc tgcgagaaaa cctctggttg aatctgactg acggctctgt
                                                                    780
cctgtgtgga aagtggttct ttgacagctc tgggggcaac gggcatgcgc tggagcatta
                                                                    840
cagagacatg ggctacccac tagccgtgaa actgggaacc atcactcctg acggggcaga
                                                                    900
tgtttattct tttcaagaag aagaacctgt tttggatcct catttggcca agcacttagc
                                                                    960
gcattttgga attgatatgc ttcatatgca tgggacagag aatgggctcc aggacaatga
                                                                   1020
catcaagctg agggtcagtg agtgggaagt gatccaggag tcgggcacga aactgaagcc
                                                                   1080
aatgtatggt cctggctaca cgggtctgaa gaacctgggc aacagctgct atctcagctc
                                                                   1140
tgtcatgcag gccatcttca gcatcccaga attccagaga gcgtatgtag gaaaccttcc
                                                                   1200
```

```
cagaatattt gactactcgc ctttagatcc aacacaagat ttcaacacac agatgactaa
                                                                     1260
gttaggacat ggccttctct caggccagta ttcaaagcct ccggtgaaat ctgaactcat
                                                                     1320
tgaacaggtg atgaaggagg agcacaagcc acagcagaac gggatctctc cgcgcatgtt
                                                                     1380
taaggccttt gtaagcaaga gccacccgga attctcctct aacaggcagc aagatgccca
                                                                     1440
ggaattette ttgcacetgg tgaatetagt agagaggaae egeategget cagaaaacee
                                                                     1500
aagcgatgtt tttcgttttt tggtggaaga acgcattcag tgctgtcaga cccggaaagt
                                                                     1560
ccgctacacg gagagggtgg attacctgat gcagttacct gtggccatgg aggcggcaac
                                                                     1620
caacaaggat gaactgatcg cttatgaact aacgagaagg gaagcagaag caaacagaag
                                                                     1680
acceptact gagttggtac gtgccaagat accatttagt geetgeette aggeettete
                                                                     1740
tgaaccagaa aatgttgatg atttctggag cagtgcccta caagcaaagt ctgcgggtgt
                                                                     1800
gaaaacatct cgctttgctt cattccctga atacttggta gtgcagataa agaagttcac
                                                                     1860
ttttggtctt gactgggttc ccaaaaaatt tgatgtttct attgatatgc cagacctact
                                                                     1920
tgatatcaac catctccgag ccagggggtt acagccagga gaggaagaac ttccagacat
                                                                     1980
cagccccccc atagtcattc ctgatgactc aaaagatcgc ctgatgaacc aattgataga
                                                                     2040
cccatcagac atcgatgagt catcagtgat gcagctggcc gagatgggtt tcccqctqqa
                                                                     2100
agcatgtcgc aaggetgtgt acttcactgg aaatatgggc gccgaggtgg ccttcaactg
                                                                     2160
gatcattgtt cacatggaag agccagattt tgctgagccg ctgaccatgc ctggttatgg
                                                                     2220
aggggcaget tetgetggag eetetgtttt tggtgettet ggaetggata accaacetee
                                                                     2280
agaggaaatc gtagctatca tcacctccat gggatttcag cgaaatcagg ctattcaggc
                                                                     2340
actacgagca acgaataata acctggaaag agcactggat tggatcttta gccaccctga
                                                                     2400
gtttgaagaa gacagtgatt ttgtgattga gatggagaat aatgccaatg caaacattat
                                                                     2460
ttctgaggcc aagcccgaag gacctagagt caaggatgga tctggaacat atgagctatt
                                                                     2520
tgcattcatc agtcacatgg gaacatccac aatgagtggt cattacattt gccatatcaa
                                                                     2580
aaaggaagga agatgggtga tttacaatga ccacaaagtt tgtgcctcaq aaaqqccccc
                                                                     2640
taaagacctg ggctacatgt acttttaccg caggatacca agctaaacct caaatataaa
                                                                     2700
aattggcgaa aagaagccat acgccttttt aatttgcc
                                                                     2738
       372
1548
DNA
       Homo sapiens
<400> 372
aatgaaatgt gtacagettg cegtgttetg actgtaceet teeetettee atgtetgaga
                                                                       60
atctccgtgt attttaagaa tgtgtgagga gagggtggcg attcatgttt caatgagcct
                                                                      120
ctttttttt tttccttcct gttttggtct atggctggtc ttactctgtg tccatgttcg
                                                                      180
gaagctctag ttttgcatag aattatagag atgccaaact ctttgaaaag agatccaaat
                                                                      240
ttatcgcttg agagaaagaa aagaaacact attttttgta ttttacctga gatacagggg
                                                                      300
cacaaataga tgagaatttt acagtgttag tgtatgtatc cctgagccta aaaaatgagg
                                                                      360
atataacctt ttacagagag agtgaggcgt ggtggtttta tatttatata tgaaaggcca
                                                                      420
gcaagctcat gcgaaggata tacttttctt ccaaaaagcg gattttttt tttttaatgt
                                                                      480
ttgaatctat atttgagatg ggagtttggt tggattaaac atgacacccc ggtgggcggt
                                                                      540
gtgtgtgtct gttgcacatg gcagggaggg gagcctcctt ctcatggggt tgccatggtg
                                                                      600
atcattggtt tttccatcaa aattgcatct tcatccatag attaccttcc ccttccctga
                                                                      660
cagtccataa ccaaaccttt aaacagaaca acctctttaa aaacttctct tgtgtttaac
                                                                      720
actttettea tgecaaegaa acagggtaaa catgeteaaa acattaaeag tetaaaeaga
                                                                      780
tatccaaata ctaagaagaa aaacaagtta tagcactttc aattttttt tttttttaa
                                                                      840
aaaaaggttt atagcttttt cttttcccat gtcacaatgt ccacttccta agaagggttt
                                                                      900
aaaatactat gaaaactttc tttttgggga aaatatctat ttggtgtttg acacatcagt
                                                                      960
aggtacttta aagacctgaa ttttatagta gctttaggag ttatatttta taaaaatcag
                                                                     1020
ttatgacttt atatttccag acaatagaga gttcagtaca tcatgctctt gtgcctctgc
                                                                     1080
```

```
ctgcttttcc tgcgttccca ccctgtattc cccccgcctt tcgggtttcc agggcttcga
                                                                 1140
gcttgatctt ttgaaagttt tattctatta aatttttgct atatcttctq qttttctqaa
                                                                 1200
aaagctttag aatggtttct ataccctttg tatcactgca tttttccata tcatctccgg
                                                                 1260
ttcgatcgcg tccagatgga aaacggaagc agaggcttct aatcgtcgca tttactqqct
                                                                 1320
ccagtgcaac acatccatct gaaaacactc ggaagtctgg tgcttggaga gggtgccatt
                                                                 1380
gtctcttgta cataaggtca tgacgtgtct atgtcaaaag ttcttatata tttcttttat
                                                                 1440
aagctgaaag aaggtctatt tttatgtttt taggtctatg aatggaacgt tgtaaatgct
                                                                 1500
tgtcaaacaa taaaaataac gaaaagtgaa aaaaaaaaa aaaaaaaa
                                                                 1548
      373
3768
DNA
Homo sapiens
<400> 373 cctctgaccc ttttggtcgc taggagtcag ccgactcagt acacaggact cactgaatgg
                                                                   60
agacacaagg ctcctccagg gagtggcggc tcatggcaat cctagaatgg tcaccagcca
                                                                  120
ggctttagag acccacacag agggcgttct gacccaaagt tgcactgggg aactccaagt
                                                                  180
ttggggattc tttgaattta actettttte tagetacatt teetattatt tgtecaatte
                                                                  240
ttaccaaaca tctctgttca cattctgaag ctgggatctg actggcagag ctagtagatg
                                                                  300
ctgactattc agatggagcc ctgacattgg ctttctcagc ttggctgtga ctggcagcag
                                                                  360
gtttgcggga gaactgtgtg tcccagaaca tgactggcta cacctgcacc tcagcaagat
                                                                  420
tggggcaggg cagttatett caaaaagetg tgtaggtggg gcagteatta etgacaaate
                                                                  480
cagtgcagac ccaggatggc ccaaacactg gcttatcctt tctgaatctc atctccaca
                                                                  540
gctgtaaagc ggggtggtgc tcgctacctc acagaggtgt tgtaaagatt agatgtaatc
                                                                  600
ttgccaagca gccactttgt aaactgtata gtcttatgca gatggaagga agggcctgtg
                                                                  660
cctaccttga tcatagcact aaacaaactg tactgtattt tcattcctct tagttatctc
                                                                  720
cctaaaaaga ctctgagttc cttgaacaca ggaaggtgtt ttatttgatt ttgttatcct
                                                                  780
cagcatgtag cagtgtctga cacacagtag gtgctctatc actgtgagag ggatggatgg
                                                                  840
900
tagatggatg gaggggggat gatgaatgga gggataatga gtggatgaat gagggaatgg
                                                                  960
gtggatggat ggatggaggg atggaggaac agatagatag atggagggat gggtgggtga
                                                                 1020
tggatggata gatggatgga gggagggatg atgaatggag ggataatgaa tggatgaatg
                                                                 1080
1140
atggatgaac acatggatgg atggatagat ggatagatgg aggaactggt ggattttgga
                                                                 1200
tggatgggtg gatggataga tgaatgaatg cctggataga caaagagatg atggatagat
                                                                 1260
1320
gtggtggatg gatagatgag tgaatgcatg gatagacaaa gagatgatgg atggatgaat
                                                                 1380
taagggatga cagatggatg gatggatgag taactggatg gacaagtgga taaatggata
                                                                 1440
gatggttgaa tacctgaatg gattgaagga ggatgcatgg atgtaagata aggctaatca
                                                                 1500
tectecacte tetttetttg caaaaceate cacceattta etcaataaac atttatteag
                                                                 1560
ttcaaacttg gcacaaagca ccatgtgagg cccaagagat acgtgggtta ataaaacaga
                                                                 1620
gctcctgccc tcctgaaaac tgcaaagaaa ggggcgtggc ttcctgagtt caaatcccaa
                                                                 1680
ctctgccagc gactagctgt acatcagtga tgtttcccta ctttctctca attaaatagg
                                                                 1740
gataatgtca gtacctatca cattgggagg tcttgcgggg attaaatgag ttaccaaatg
                                                                 1800
ccaagtgttt gggacagggc ctggcaccca gcaaagtctc ttgtgagtgc tggctgctat
                                                                 1860
tatcctaatg gagaagatgg catgaaaacc aggaaatagg atgccctttg ggaagcaatg
                                                                 1920
caacaggaac ttacacaaag aaaggaaagg aggaagcaat tagtggtgtc tcaaaggagt
                                                                 1980
atgtcaagaa aaacttttca gagggaaacc tttgagcagg gccatgaaaa caggagttct
                                                                 2040
ctaagagatt gtggacttgc ctgggaccac ctggctataa gcacaaaacc atccggttcc
                                                                 2100
tttctgtcac ttctggcggg tgaggggtct ctggcaaagg ggcagaaggt gcgtgagagg
                                                                 2160
```

```
ttgcgaatgg caggactgtc ctggccagcc ggggcacctg gtggccaagc ttagaaacat
                                                                      2220
gacaggtcct cttgggaggg ctgaccgcag ggagcgttgg gtttcaggct gctggcgtcg
                                                                      2280
gcttctgtgg tgccctttct gtcggctatg agagtccaga cagtgcccaa cctcctcccc
                                                                      2340
ttettteeae aegeaeaaee aeeceaeeee etgtggeetg agetgteetg eetegeeaea
                                                                      2400
atggcacctg ccctaaaata gcttcccatg tgagggctag agaaaggaaa agattagacc
                                                                      2460
ctccctggat gagagagaga aagtgaagga gggcagggga gggggacagc gagccattga
                                                                      2520
gcgatctttg tcaagcatcc cagaaggtat aaaaacgccc ttgggaccag gcagcctcaa
                                                                      2580
accccagetg ttggggccag gacacccagt gagcccatac ttgctctttt tgtcttcttc
                                                                      2640
agactgcgcc atggggctca gcgacgggga atggcagttg gtgctgaacg tctggggggaa
                                                                      2700
ggtggaggct gacatcccag gccatgggca ggaagtcctc atcaggtaaa aggaagagat
                                                                      2760
tecattgece etgecaceca caccetaaga teaagggtgt teagetgeaa ggtggaaagt
                                                                      2820
ttgcacgtgg ggtaggtcag ttggctgcat tagttaaggg tgttagaacg gtcacttgct
                                                                      2880
ttttctttgc ttttaagtgt cagggattgg actcaggaga gggaaaggag ccatttcagg
                                                                      2940
ctgatatcag cagctggagg aagcatgaga atcaaaccta ggatgctcag agtccaccag
                                                                     3000
gaagaatttt agaattatag acagtcagag ttaacaaggg tcctgagaga ttttgtacag
                                                                     3060
ccacctctct tacaggatga ggacaaaaag cgactgagaa ggggaggaca tttccagagt
                                                                     3120
cacagctcat taaatgctct taaagtgtca aggttaagac atgctcttca aggggagaca
                                                                     3180
gatetggtte tagaettgge tetgeeactg ageeactggg tgaeetttgg gaaggtaete
                                                                     3240
aacctctcgg agcctcaatt tcctctcctg tacagtgagg ggatatccta atatctatat
                                                                     3300
cctagaggag atgtgagaat taaataaaat aatgcatgca agaggcctgg catggttcct
                                                                     3360
ggcatatact gagtectaga aatgttagta getattaetg atgaageeca ggetagggae
                                                                     3420
ctttcaaagc attgcaatta gagaacagaa gatagaggct cattagtgac cttcgatgtt
                                                                     3480
gagtatgtet etagtttgag aggtetgaat gatgtggtet geaagtatat eetgeettet
                                                                     3540
accacaaggg attccagaat acaccaaaga aaacaaaatt ctgaggtttg taaatagagg
                                                                     3600
gtggctgtgg tttgtacata gaagctcatc tcctcgttgc cttctatccc aaaggtgata
                                                                     3660
cactettete ttggcccett cecteaceat tetgagetgg tteecteaga agtetaatag
                                                                     3720
gttaagaatc aacgtttctg ccaacgggag gaaggaagtg ggcgccgg
                                                                     3768
       374
1172
DNA
Homo sapiens
<400> 374 gagacattcc tcaattgctt agacatattc tgagcctaca gcagaggaac ctccagtctc
                                                                       60
agcaccatga atcaaactgc gattctgatt tgctgcctta tctttctgac tctaagtggc
                                                                      120
attcaaggag tacctctctc tagaaccgta cgctgtacct gcatcagcat tagtaatcaa
                                                                      180
cctgttaatc caaggtcttt agaaaaactt gaaattattc ctgcaagcca attttgtcca
                                                                      240
cgtgttgaga tcattgctac aatgaaaaag aagggtgaga agagatgtct gaatccagaa
                                                                      300
tcgaaggcca tcaagaattt actgaaagca gttagcaagg aaatgtctaa aagatctcct
                                                                      360
taaaaccaga ggggagcaaa atcgatgcag tgcttccaag gatggaccac acagaggctg
                                                                      420
ceteteccat caetteceta catggagtat atgteaagee ataattgtte ttagtttgca
                                                                      480
gttacactaa aaggtgacca atgatggtca ccaaatcagc tgctactact cctgtaggaa
                                                                      540
ggttaatgtt catcatccta agctattcag taataactct accctggcac tataatgtaa
                                                                      600
gctctactga ggtgctatgt tcttagtgga tgttctgacc ctgcttcaaa tatttccctc
                                                                      660
acctttccca tcttccaagg gtactaagga atctttctgc tttggggttt atcagaattc
                                                                      720
tcagaatctc aaataactaa aaggtatgca atcaaatctg ctttttaaag aatgctcttt
                                                                      780
acttcatgga cttccactgc catcctccca aggggcccaa attctttcag tggctaccta
                                                                      840
catacaattc caaacacata caggaaggta gaaatatctg aaaatgtatg tgtaagtatt
                                                                      900
cttatttaat gaaagactgt acaaagtata agtcttagat gtatatattt cctatattgt
                                                                      960
tttcagtgta catggaataa catgtaatta agtactatgt atcaatgagt aacaggaaaa
                                                                     1020
```

```
ttttaaaaat acagatagat atatgctctg catgttacat aagataaatg tgctgaatgg
                                                                     1080
ttttcaaata aaaatgaggt actctcctgg aaatattaag aaagactatc taaatgttga
                                                                     1140
aagatcaaaa ggttaataaa gtaattataa ct
                                                                     1172
       375
1550
DNA
Homo sapiens
<400> 375
tcaacgcctg cctcccctcg agcgtcctca gcgcagccgc cgcccgcgga gccagcacga
                                                                       60
acgageceag caceggeegg atggagegte egeaaceega cageatgeee caggatttgt
                                                                     120
cagaggecet gaaggaggee accaaggagg tgeacaceca ggeagagaat getgagttea
                                                                      180
tgaggaactt tcagaagggc caggtgaccc gagacggctt caagctggtg atggcctccc
                                                                      240
tgtaccacat ctatgtggcc ctggaggagg agattgagcg caacaaggag agcccagtct
                                                                      300
tegeceetgt etaetteeca gaagagetge acegeaagge tgecetggag caggacetgg
                                                                     360
ccttctggta cgggccccgc tggcaggagg tcatccccta cacaccagcc atgcagcgct
                                                                      420
atgtgaageg geteeaegag gtggggegea cagageeega getgetggtg geeeaegeet
                                                                      480
acaccegeta cetgggtgac etgtetgggg gecaggtget caaaaagatt geccagaaag
                                                                      540
ecctggacet geccagetet ggegagggee tggeettett cacetteece aacattgeca
                                                                      600
gtgccaccaa gttcaagcag ctctaccgct cccgcatgaa ctccctggag atgactcccg
                                                                      660
cagtcaggca gagggtgata gaagaggcca agactgcgtt cctgctcaac atccagctct
                                                                      720
ttgaggagtt gcaggagctg ctgacccatg acaccaagga ccagagcccc tcacgggcac
                                                                     780
cagggetteg ceagegggee ageaacaaag tgeaagatte tgeeceegtg gagaeteeca
                                                                     840
gagggaagee eccaeteaae accegeteee aggeteeget teteegatgg gteettacae
                                                                     900
teagetttet ggtggegaea gttgetgtag ggetttatge catgtgaatg caggeatget
                                                                     960
ggctcccagg gccatgaact ttgtccggtg gaaggccttc tttctagaga gggaattctc
                                                                    1020
ttggctggct tccttaccgt gggcactgaa ggctttcagg gcctccagcc ctctcactgt
                                                                    1080
gtccctctct ctggaaagga ggaaggagcc tatggcatct tccccaacga aaagcacatc
                                                                    1140
caggcaatgg cctaaacttc agagggggcg aaggggtcag ccctgccctt cagcatcctc
                                                                    1200
agtteetgea geagageetg gaagaeaeee taatgtggea getgteteaa aeeteeaaaa
                                                                    1260
gccctgagtt tcaagtatcc ttgttgacac ggccatgacc actttccccg tgggccatgg
                                                                    1320
caatttttac acaaacctga aaagatgttg tgtcttgtgt ttttgtctta tttttgttgg
                                                                    1380
agccactctg ttcctggctc agcctcaaat gcagtatttt tgttgtgttc tgttgttttt
                                                                    1440
atagcagggt tggggtggtt tttgagccat gcgtgggtgg ggagggaggt gtttaacggc
                                                                    1500
actgtggcct tggtctaact tttgtgtgaa ataataaaca acattgtctg
                                                                    1550
       376
1585
DNA
       Homo sapiens
<400> 376
acagcagtta cactgcggcg ggcgtctgtt ctagtgtttg agccgtcgtg cttcaccggt
                                                                      60
ctacctcgct agcatgtcgg gccgcggcaa gactggcggc aaggcccgcg ccaaqqccaa
                                                                     120
gtcgcgctcg tcgcgcgccg gcctccagtt cccagtgggc cgtgtacacc ggctgctgcg
                                                                     180
gaagggccac tacgccgagc gcgttggcgc cggcgcgcca gtgtacctgg cggcagtgct
                                                                     240
ggagtacete accgetgaga teetggaget ggegggeaat geggeeegeg acaacaagaa
                                                                     300
gacgcgaatc atcccccgcc acctgcagct ggccatccgc aacgacgagg agctcaacaa
                                                                     360
gctgctgggc ggcgtgacga tcgcccaggg aggcgtcctg cccaacatcc aggccgtgct
                                                                     420
getgeecaag aagaecageg eeacegtggg geegaaggeg eeetegggeg geaagaagge
                                                                     480
cacccaggec teccaggagt actaagaggg eeegegeege ggeeggeege eeeageteee
                                                                     540
catgccacca caaaggccct tttaagggcc accaccgccc tcatggaaag agctgagccg
                                                                     600
660
tegeegeeeg geetegagte eeegeeegee eeegeteeeg teeegeaceg eetgeegegt
                                                                     720
```

```
eggeeteggg cetgeeetgt eegeegteeg ceeteeggta gggtteggge etteeggatg
                                                                       780
eggettggge getetteggg gaeeteegtg gegeggaaga eeegageetg eeggggggag
                                                                       840
gccggcggcg ccgcacctgc ccgcctcggc gttcgtgact cagccgcccc atcccgagtc
                                                                       900
gctaaggggc tgcggggagg ccgcagcacc ttctggaaga cttggccttc cgctctgacg
                                                                       960
cagggccgag gtgggcagtc caggccgaga gccggcggcc ctgaaggtga gtgaggccct
                                                                      1020
eggeagetge ageeggggtg tetggtacee eeeeggegtg gtgettagee eaggaettte
                                                                      1080
agacggccgc tggccgggag gctttggtgg gagagacgcg atcgccgatt tcggtctggc
                                                                      1140
gccccttctg cggccgggac ccaggccttt cacatcagct ctccctccat cttcattcat
                                                                      1200
aggtetgege tggggeeggg aegaageaet tggtaaeagg cacatettee teeegagtga
                                                                      1260
etgeeteeta ggaggaeatt taggggaggg cagaggeetg cagtttgget teaeggetgg
                                                                      1320
ctatgtggac agcaagagtc gttttgcgga acgcgactgg cagccaggcc tgtcgggccc
                                                                      1380
eegaegeege eecattteee tteeageaaa eteaactegg caatceaage acetagatae
                                                                      1440
cagcacaagt cggttaatcc ctgtctggac tgagcctccg ttggcttctg aactggaatt
                                                                      1500
ctgcagctaa cccttccacg actagaacct taggcattgg ggagttttag atggactaat
                                                                      1560
tttattaaag gattgttttt ttttt
                                                                      1585
       377
627
DNA
Homo sapiens
àgtctccggc gagttgttgc ctgggctgga cgtggttttg tctgctgcgc ccgctcttcg
                                                                        60
egetetegtt teattttetg eagegegeea egaggatgge ceacaageag atetaetaet
                                                                       120
cggacaagta cttcgacgaa cactacgagt accggcatgt tatgttaccc agagaacttt
                                                                       180
ccaaacaagt acctaaaact catctgatgt ctgaagagga gtggaggaga cttggtgtcc
                                                                       240
aacagagtet aggetgggtt cattacatga tteatgagee agaaceacat attettetet
                                                                       300
ttagacgacc tcttccaaaa gatcaacaaa aatgaagttt atctggggat cgtcaaatct
                                                                       360
ttttcaaatt taatgtatat gtgtatataa ggtagtattc agtgaatact tgagaaatgt
                                                                       420
acaaatcttt catccatacc tgtgcatgag ctgtattctt cacagcaaca gagctcagtt
                                                                       480
aaatgcaact gcaagtaggt tactgtaaga tgtttaagat aaaagttctt ccagtcagtt
                                                                       540
tttctcttaa gtgcctgttt gagtttactg aaacagttta cttttgttca ataaagtttg
                                                                       600
tatgttgcat ttaaaaaaaa aaaaaaa
                                                                       627
       378
2161
DNA
Homo sapiens
<400> 378
gggcgatect geeggageee egeegeegee ggettggatt etgaaacett eettgtatee
                                                                        60
ctcctgagac atctttgctg caagatcgag gctgtcctct ggtgagaagg tggtgaggct
                                                                       120
tecegteata ttecagetet gaacageaac atggggtgca aagteetget caacattggg
                                                                       180
cagcagatgc tgcggcggaa ggtggtggac tgtagcccgg aggagacgcg gctgtctcgc
                                                                       240
tgcctgaaca cttttgatct ggtggccctc ggggtgggca gcacactggg tgctggtgtc
                                                                       300
tacgtcctgg ctggagctgt ggcccgtgag aatgcaggcc ctgccattgt catctccttc
                                                                       360
ctgatcgctg cgctggcctc agtgctggct ggcctgtgct atggcgagtt tggtgctcgg
                                                                       420
gtccccaaga cgggctcagc ttacctctac agctatgtca ccgttggaga gctctgggcc
                                                                       480
ttcatcaccg gctggaactt aatcctctcc tacatcatcg gtacttcaag cgtagcgagg
                                                                       540
gcctggagcg ccaccttcga cgagctgata ggcagaccca tcggggagtt ctcacggaca
                                                                       600
cacatgactc tgaacgcccc cggcgtgctg gctgaaaacc ccgacatatt cgcagtgatc
                                                                       660
ataattctca tcttgacagg acttttaact cttggtgtga aagagtcggc catggtcaac
                                                                       720
aaaatattca cttgtattaa cgtcctggtc ctgggcttca taatggtgtc aggatttgtg
                                                                       780
aaaggatcgg ttaaaaactg gcagctcacg gaggaggatt ttgggaacac atcaggccgt
                                                                       840
```

```
ctctgtttga acaatgacac aaaagaaggg aagcccggtg ttggtggatt catgcccttc
                                                                       900
gggttetetg gtgteetgte gggggeageg acttgettet atgeettegt gggetttqae
                                                                       960
tgcatcgcca ccacaggtga agaggtgaag aacccacaga aggccatccc cgtggggatc
                                                                      1020
gtggcgtccc tcttgatctg cttcatcgcc tactttgggg tgtcggctgc cctcacgctc
                                                                      1080
atgatgccct acttctgcct ggacaataac agccccctgc ccgacgcctt taagcacgtg
                                                                      1140
ggctgggaag gtgccaagta cgcagtggcc gtgggctccc tctgtgctct ttccgccagt
                                                                      1200
cttctaggtt ccatgtttcc catgcctcgg gttatctatg ccatggctga ggatggactg
                                                                      1260
ctatttaaat tcttagccaa cgtcaatgat aggaccaaaa caccaataat cgccacatta
                                                                      1320
gcctcgggtg ccgttgctgc tgtgatggcc ttcctctttg acctgaagga cttggtggac
                                                                      1380
ctcatgtcca ttggcactct cctggcttac tcgttggtgg ctgcctgtgt gttggtctta
                                                                      1440
eggtaceage cagageagee taacetggta taceagatgg ceagtactte egacgagtta
                                                                      1500
gatccagcag accaaaatga attggcaagc accaatgatt cccagctggg gtttttacca
                                                                      1560
gaggcagaga tgttctcttt gaaaaccata ctctcaccca aaaacatgga gccttccaaa
                                                                      1620
atctctgggc taattgtgaa catttcaacc agccttatag ctgttctcat catcaccttc
                                                                      1680
tgcattgtga ccgtgcttgg aagggagget ctcaccaaag gggcgctgtg ggcagtcttt
                                                                      1740
etgetegeag ggtetgeeet cetetgtgee gtggteaegg gegteatetg gaggeageee
                                                                      1800
gagagcaaga ccaagctctc atttaaggtt cccttcctgc cagtgctccc catcctgagc
                                                                      1860
atcttcgtga acgtctatct catgatgcag ctggaccagg gcacctgggt ccggtttgct
                                                                      1920
gtgtggatgc tgataggctt catcatctac tttggctatg gcctgtggca cagcgaggag
                                                                      1980
gcgtccctgg atgccgacca agcaaggact cctgacggca acttggacca gtgcaagtga
                                                                      2040
egcacagece egeceeeegg aggtggcage ageceegagg gaegeeeeca gaggaeeggg
                                                                      2100
aggcacecca cectececae cagtgeaaca gaaaceaeet gegteeacae eeteaetgea
                                                                      2160
                                                                      2161
       379
2824
DNA
Homo sapiens
<400> 379 geggeegett tegatttege ttteceetaa atggetgage ttetegeeag egeaggatea
                                                                       60
geetgtteet gggaetttee gagageeeeg ceetegttee eteeceeage egeeagtagg
                                                                      120
ggaggactcg gcggtacccg gagcttcagg ccccaccggg gcgcggagag tcccagaccc
                                                                      180
ggccgggacc gggacggcgt ccgagtgcca atggctagct ctaggtgtcc cgctccccgc
                                                                      240
gggtgccgct gcctccccgg agcttctctc gcatggctgg ggacagtact gctacttctc
                                                                      300
gccgactggg tgctgctccg gaccgcgctg ccccgcatat tctccctgct ggtgcccacc
                                                                      360
gcgctgccac tgctccgggt ctgggcggtg ggcctgagcc gctgggccgt gctctggctg
                                                                      420
ggggcctgcg gggtcctcag ggcaacggtt ggctccaaga gcgaaaacgc aggtgcccag
                                                                      480
ggctggctgg ctgctttgaa gccattagct gcggcactgg gcttggccct gccgggactt
                                                                      540
gccttgttcc gagagctgat ctcatgggga gcccccgggt ccgcggatag caccaggcta
                                                                      600
ctgcactggg gaagtcaccc taccgccttc gttgtcagtt atgcagcggc actgcccgca
                                                                      660
gcagccctgt ggcacaaact cgggagcctc tgggtgcccg gcggtcaggg cggctctgga
                                                                      720
aaccetgtge gteggettet aggetgeetg ggeteggaga egegeegeet etegetgtte
                                                                      780
ctggtcctgg tggtcctctc ctctcttggg gagatggcca ttccattctt tacgggccgc
                                                                      840
etcactgaet ggattetaea agatggetea geegataeet teaetegaaa ettaaetete
                                                                      900
atgtccattc tcaccatagc cagtgcagtg ctggagttcg tgggtgacgg gatctataac
                                                                      960
aacaccatgg gccacgtgca cagccacttg cagggagagg tgtttggggc tgtcctgcgc
                                                                     1020
caggagacgg agtttttcca acagaaccag acaggtaaca tcatgtctcg ggtaacagag
                                                                     1080
gacacgtcca ccctgagtga ttctctgagt gagaatctga gcttatttct gtggtacctg
                                                                     1140
gtgcgaggcc tatgtctctt ggggatcatg ctctggggat cagtgtccct caccatggtc
                                                                     1200
accetgatea ceetgeetet getttteett etgeecaaga aggtgggaaa atggtaceag
                                                                     1260
```

```
ttgctggaag tgcaggtgcg ggaatctctg gcaaagtcca gccaggtggc cattgaggct
                                                                      1320
ctgtcggcca tgcctacagt tcgaagcttt gccaacgagg agggcgaagc ccagaagttt
                                                                      1380
agggaaaagc tgcaagaaat aaagacactc aaccagaagg aggctgtggc ctatgcagtc
                                                                      1440
aactcctgga ccactagtat ttcaggtatg ctgctgaaag tgggaatcct ctacattggt
                                                                      1500
gggcagctgg tgaccagtgg ggctgtaagc agtgggaacc ttgtcacatt tgttctctac
                                                                      1560
cagatgcagt tcacccaggc tgtggaggta ctgctctcca tctaccccag agtacagaag
                                                                      1620
gctgtgggct cctcagagaa aatatttgag tacctggacc gcacccctcg ctgcccaccc
                                                                      1680
agtggtctgt tgactccctt acacttggag ggccttgtcc agttccaaga tgtctccttt
                                                                      1740
gcctacccaa accgcccaga tgtcttagtg ctacaggggc tgacattcac cctacgccct
                                                                      1800
ggcgaggtga cggcgctggt gggacccaat gggtctggga agagcacagt ggctgcctg
                                                                      1860
ctgcagaatc tgtaccagcc caccggggga cagctgctgt tggatgggaa gccccttccc
                                                                      1920
caatatgagc accgctacct gcacaggcag gtggctgcag tgggacaaga gccacaggta
                                                                      1980
tttggaagaa gtcttcaaga aaatattgcc tatggcctga cccagaagcc aactatggaq
                                                                      2040
gaaatcacag ctgctgcagt aaagtctggg gcccatagtt tcatctctgg actccctcag
                                                                      2100
ggctatgaca cagaggtaga cgaggctggg agccagctgt cagggggtca gcqacagqca
                                                                      2160
gtggcgttgg cccgagcatt gatccggaaa ccgtgtgtac ttatcctgga tgatgccacc
                                                                      2220
agtgccctgg atgcaaacag ccagttacag gtggagcagc tcctgtacga aagccctgag
                                                                      2280
cggtactccc gctcagtgct tctcatcacc cagcacctca gcctggtgga gcaggctgac
                                                                      2340
cacatcctct ttctggaagg aggcgctatc cgggaggggg gaacccacca gcagctcatg
                                                                      2400
gagaaaaagg ggtgctactg ggccatggtg caggctcctg cagatgctcc agaatgaaag
                                                                      2460
cetteteaga cetgegeact ceatetecet ceettttett etetetgtgg tggagaacea
                                                                      2520
cagctgcaga gtagcagctg cctccaggat gagttacttg aaatttgcct tgagtgtgtt
                                                                      2580
acctcctttc caageteete gtgataatge agaetteetg gagtacaaac acaggatttg
                                                                      2640
taatteetae tgtaaeggag tttagageea gggetgatge tttggtgtgg ceageaetet
                                                                      2700
gaaactgaga aatgttcaga atgtacggaa agatgatcag ctattttcaa cataactgaa
                                                                      2760
ggcatatgct ggcccataaa caccctgtag gttcttgata tttataataa aattggtgtt
                                                                      2820
ttgt
                                                                      2824
       380
2436
DNA
Homo sapiens
<400> 380 aaggcacete tgeegecaca gaeettgeag ttaaeteege eetgaeecae eetteeegat
                                                                       60
gcagtccctg atgcaggctc ccctcctgat cgccctgggc ttgcttctcg cgacccctgc
                                                                      120
gcaagcccac ctgaaaaagc catcccagct cagtagcttt tcctgggata actgtgatga
                                                                      180
agggaaggac cctgcggtga tcagaagcct gactctggag cctgacccca tcgtcgttcc
                                                                      240
tggaaatgtg acceteagtg tegtgggeag caceagtgte cecetgagtt etectetgaa
                                                                      300
ggtggattta gttttggaga aggaggtggc tggcctctgg atcaagatcc catgcacaga
                                                                      360
ctacattggc agctgtacct ttgaacactt ctgtgatgtg cttgacatgt taattcctac
                                                                      420
tggggagccc tgcccagagc ccctgcgtac ctatgggctt ccttgccact gtcccttcaa
                                                                      480
agaaggaacc tactcactgc ccaagagcga attcgttgtg cctgacctgg agctgccaq
                                                                      540
ttggctcacc accgggaact accgcataga gagcgtcctg agcagcagtg ggaagcgtct
                                                                      600
gggctgcatc aagatcgctg cctctctaaa gggcatataa catggcatct gccacagcag
                                                                      660
aatggagcgg tgtgaggaag gtcccttttc ctctgttttg tgtttgccaa ggccaaactc
                                                                      720
ccactctctg cccccttta atcccctttc tacagtgagt ccactaccct cactgaaaat
                                                                      780
cattttgtac cacttacatt ttaggctggg gcaagcagcc ctgacctaag ggagaatgag
                                                                      840
ttggacagtt cttgatagcc cagggcatct gctgggctga ccacgttact catccccgtt
                                                                      900
aacattctct ctaaagagcc tcgttcattt ccaaagcagt taaggaatgg gaaccagagt
                                                                      960
gttttaggac ctgaagaatc tttatgactc tctctctttc actcttttt ttttttgtca
                                                                     1020
```

```
ctaagttaaa agcgaagtga gagtattaac gtttttgttc tcctccggcc ccctgttaca
                                                                     1080
atgaaggggc aaaagtattt gctcttagtc tattcctccc ttaacttctg tgactaattt
                                                                     1140
ttatttcctt tctagatttg cccaattaat actagggtgc agtgtatcct ggagaggtag
                                                                     1200
ggtgtgtggg ggaggaatcc cttgggggag atattaggag tgctctgttg tttacaaact
                                                                     1260
cacggtaccc gcagggccta gcaagagact taaatgactg ataagaaccg tgagaaacat
                                                                     1320
gttgcttcca ggcttgattt cgatttttcg ctttttttt ttttgagaca gaatctcact
                                                                     1380
ttgtcaccag gctggagtgc agtggtgcaa tctcacctca ctgcaacctc cgcctcctgg
                                                                     1440
gttcaagcaa ttctcctgcc tcagcctccc aagtagcttg gactacaggc cctgccacca
                                                                     1500
cgcccggcta atttgtgtat ttttagtaga gatggggttt caccatgttg gccaggatgg
                                                                     1560
tetegatete ttgacetegt gatetgteea cettggeett geaaageget ggattacagg
                                                                     1620
catgagecac tacacccage egatttttee tttttgatta aagatgetat tacaatgtaa
                                                                     1680
atatttetta cacagaaagt cacagcacat gtgcccattg atacaagget getgaggeet
                                                                     1740
ggtctccagt tggaaatata attaagggtg gcaaggactg gagtcagttg gagagtgcat
                                                                     1800
agccagtctg tgaagacaac tgccagatac tggcaatact ccagcctggt gacagagtga
                                                                     1860
gactctgtct caaaaaaaaa gtttcaatgt ttactcctag agaagccaaa aatccagatt
                                                                     1920
tgtatatgaa atcttaccat tttaaaaagat tggcagctaa ttatttttt aaaaagctgt
                                                                     1980
gcagtgtgat gtgtcccaaa cggactggct catgggtggc cacgtcacaa cctctgatct
                                                                     2040
cagaccgtgc atgccttgtc ctcttaagac aactcctgtg gcaccgtttc tccctccaca
                                                                     2100
gggccaaagc catagtgtcc ggtcccaagg acaaggctct tccagtgcta ggagaggtat
                                                                     2160
gagcagcctc tcacctgtga gctgtgggga tcacaaggct gcctgcctca gtcttggagt
                                                                     2220
cctgttgggt gaatgaggca gatgggaaag agcctcacca gcagctgctt ttggagcagg
                                                                     2280
ggtccaagga agagagggtg gcctcgacat caaactgcct ggatttttct accaccctgt
                                                                     2340
tacatcataa caacttctga aacacacca agccctgagt tctgggctca tttgaagcct
                                                                     2400
ggaatagcaa taaatctttt taacttgcgg acagtt
                                                                     2436
      381
5434
DNA
Homo sapiens
^{<\!400>} 381 cgtccgcgtg gggggggtgt gtgcccgcct tgcgcatgcg tgttccctgg gcatggccgg
                                                                       60
ctccgttcca tccttctgca cagggtatcg cctctctccg tttggtacat cccctcctcc
                                                                      120
cccacgcccg gactggggtg gtagacgcgc ctccgctcat cgcccctccc catcggtttc
                                                                      180
egegegaaaa geeggggege etgegetgee geegeegegt etgetgaage eteegagatg
                                                                      240
ceggegegta eegeceeage eegggtgeee acaetggeeg teeeggeeat etegetgeee
                                                                      300
gacgatgtcc gcaggcggct caaagatttg gaaagagaca gcttaacaga aaaggaatgt
                                                                      360
gtgaaggaga aattgaatct cttgcacgaa tttctgcaaa cagaaataaa gaatcagtta
                                                                      420
tgtgacttgg aaaccaaatt acgtaaagaa gaattatccg aggagggcta cctggctaaa
                                                                      480
gtcaaatccc ttttaaataa agatttgtcc ttggagaacg gtgctcatgc ttacaaccgg
                                                                      540
gaagtgaatg gacgtctaga aaacgggaac caagcaagaa gtgaagcccg tagagtggga
                                                                      600
atggcagatg ccaacagece ceccaaacee etttecaaae etegcaegee caggaggage
                                                                      660
aagtccgatg gagaggctaa gcctgaacct tcacctagcc ccaggattac aaggaaaagc
                                                                      720
accaggeaaa ccaccateac ateteatttt geaaagggee etgeeaaacg gaaaceteag
                                                                      780
gaagagtetg aaagageeaa ateggatgag tecateaagg aagaagaeaa agaeeaggat
                                                                      840
gagaagagac gtagagttac atccagagaa cgagttgcta gaccgcttcc tgcagaagaa
                                                                      900
cctgaaagag caaaatcagg aacgcgcact gaaaaggaag aagaaagaga tgaaaaagaa
                                                                      960
                                                                     1020
gaaaagagac tccgaagtca aaccaaagaa ccaacaccca aacagaaact gaaggaggag
ccggacagag aagccagggc aggcgtgcag gctgacgagg acgaagatgg agacgagaaa
                                                                     1080
gatgagaaga agcacagaag tcaacccaaa gatctagctg ccaaacggag gcccgaagaa
                                                                     1140
aaagaacctg aaaaagtaaa tccacagatt tctgatgaaa aagacgagga tgaaaaggag
                                                                     1200
```

```
gagaagagac gcaaaacgac ccccaaagaa ccaacggaga aaaaaatggc tcgcgccaaa
                                                                    1260
acagtcatga actecaagac ecaceeteec aagtgeatte agtgegggea gtaeetggae
                                                                    1320
gaccctgacc tcaaatatgg gcagcaccca ccagacgcgg tggatgagcc acagatgctq
                                                                    1380
acaaatgaga agctgtccat ctttgatgcc aacgagtctg gctttgagag ttatgaggcg
                                                                    1440
cttccccagc acaaactgac ctgcttcagt gtgtactgta agcacggtca cctgtgtccc
                                                                    1500
atcgacaccg gcctcatcga gaagaatatc gaactcttct tttctggttc agcaaaacca
                                                                    1560
atctatgatg atgacccgtc tcttgaaggt ggtgttaatg gcaaaaatct tggccccata
                                                                    1620
aatgaatggt ggatcactgg ctttgatgga ggtgaaaagg ccctcatcgg cttcagcacc
                                                                    1680
teatttgccg aatacattet gatggatece agteeegagt atgegeecat atttgggetg
                                                                    1740
atgcaggaga agatctacat cagcaagatt gtggtggagt tcctgcagag caattccgac
                                                                    1800
tegacetatg aggacetgat caacaagate gagaceaegg tteeteette tggeeteaae
                                                                    1860
ttgaaccgct tcacagagga ctccctcctg cgacacgcgc agtttgtggt ggagcaggtg
                                                                    1920
gagagttatg acgaggccgg ggacagtgat gagcagccca tcttcctgac gccctgcatg
                                                                    1980
egggaeetga teaagetgge tggggteaeg etgggaeaga ggegageeca ggegaggegg
                                                                    2040
cagaccatca ggcattctac cagggagaag gacaggggac ccacgaaagc caccaccacc
                                                                    2100
aagctggtct accagatctt cgatactttc ttcgcagagc aaattgaaaa ggatgacaga
                                                                    2160
gaagacaagg agaacgcctt taagcgccgg cgatgtgggg tctgtgaggt gtgtcagcag
                                                                    2220
cctgagtgtg ggaaatgtaa agcctgcaag gacatggtta aatttggtgg cagtggacgg
                                                                    2280
agcaagcagg cttgccaaga gcggaggtgt cccaatatgg ccatgaagga ggcagatgac
                                                                    2340
gatgaggaag tegatgataa cateecagag atgeegteae eeaaaaaaat geaceagggg
                                                                    2400
aagaagaaga aacagaacaa gaatcgcatc tcttgggtcg gagaagccgt caagactgat
                                                                    2460
gggaagaaga gttactataa gaaggtgtgc attgatgcgg aaaccctgga agtgggggac
                                                                    2520
tgtgtctctg ttattccaga tgattcctca aaaccgctgt atctagcaag ggtcacggcg
                                                                    2580
ctgtgggagg acagcagcaa cgggcagatg tttcacgccc actggttctg cgctgggaca
                                                                    2640
gacacagtcc tcggggccac gtcggaccct ctggagctgt tcttggtgga tgaatgtgag
                                                                    2700
gacatgcagc tttcatatat ccacagcaaa gtgaaagtca tctacaaagc cccctccgaa
                                                                    2760
aactgggcca tggagggagg catggatccc gagtccctgc tggaggggga cgacgggaag
                                                                    2820
acctacttet accagetgtg gtatgateaa gaetaegega gattegagte eeeteeaaaa
                                                                    2880
acccagecaa cagaggacaa caagtteaaa ttetgtgtga getgtgeeeg tetggetgag
                                                                    2940
atgaggcaaa aagaaatccc cagggtcctg gagcagctcg aggacctgga tagccgggtc
                                                                    3000
ctctactact cagccaccaa gaacggcatc ctgtaccgag ttggtgatgg tgtgtacctg
                                                                    3060
ecceetgagg cetteaegtt caacateaag etgtecagte eegtgaaaeg eccaeggaag
                                                                    3120
gagcccgtgg atgaggacct gtacccagag cactaccgga aatactccga ctacatcaaa
                                                                    3180
ggcagcaacc tggatgcccc tgagccctac cgaattggcc ggatcaaaga gatcttctgt
                                                                    3240
                                                                    3300
cccaagaaga gcaacggcag gcccaatgag actgacatca aaatccgggt caacaagttc
tacaggcctg agaacaccca caagtccact ccagcgagct accacgcaga catcaacctg
                                                                    3360
ctctactgga gcgacgagga ggccgtggtg gacttcaagg ctgtgcaggg ccgctgcacc
                                                                    3420
gtggagtatg gggaggacct gcccgagtgc gtccaggtgt actccatggg cggccccaac
                                                                    3480
cgcttctact tcctcgaggc ctataatgca aagagcaaaa gctttgaaga tcctcccaac
                                                                    3540
3600
teccaageet gtgageegag egageeagag atagagatea agetgeecaa getgeggaee
                                                                    3660
ctggatgtgt tttctggctg cggggggttg tcggagggat tccaccaagc aggcatctct
                                                                    3720
gacacgctgt gggccatcga gatgtgggac cctgcggccc aggcgttccg gctgaacaac
                                                                    3780
eceggeteca cagtgtteac agaggaetge aacateetge tgaagetggt catggetggg
                                                                    3840
gagaccacca actecegegg ceageggetg ecceagaagg gagacgtgga gatgetgtge
                                                                    3900
ggcgggccgc cctgccaggg cttcagcggc atgaaccgct tcaattcgcg cacctactcc
                                                                    3960
aagttcaaaa actctctggt ggtttccttc ctcagctact gcgactacta ccggccccgg
                                                                    4020
ttcttcctcc tggagaatgt caggaacttt gtctccttca agcgctccat ggtcctgaag
                                                                    4080
```

```
ctcaccctcc gctgcctggt ccgcatgggc tatcagtgca ccttcggcgt gctgcaggcc
                                                                      4140
ggtcagtacg gcgtggccca gactaggagg cgggccatca tcctggccgc ggcccctgga
                                                                      4200
gagaagetee etetgtteee ggageeactg caegtgtttg eteceeggge etgeeagetg
                                                                      4260
agcgtggtgg tggatgacaa gaagtttgtg agcaacataa ccaggttgag ctcgggtcct
                                                                      4320
ttccggacca tcacggtgcg agacacgatg tccgacctgc cggaggtgcg gaatggagcc
                                                                      4380
teggeactgg agateteeta caaeggggag ceteagteet ggtteeagag geageteegg
                                                                      4440
ggcgcacagt accagcccat cctcagggac cacatctgta aggacatgag tgcattggtg
                                                                      4500
getgeeegea tgeggeacat eccettggee ecagggteag actggegega tetgeeeaac
                                                                      4560
atcgaggtgc ggctctcaga cggcaccatg gccaggaagc tgcggtatac ccaccatgac
                                                                      4620
aggaagaacg geegeageag etetggggee eteegtgggg tetgeteetg egtgqaaqee
                                                                      4680
ggcaaagect gegaceeege agecaggeag tteaacacee teateceetg gtgeetgeee
                                                                      4740
cacaccggga accggcacaa ccactgggct ggcctctatg gaaggctcga gtgggacggc
                                                                      4800
ttcttcagca caaccgtcac caaccccgag cccatgggca agcagggccg cgtgctccac
                                                                      4860
ccagagcagc accgtgtggt gagcgtgcgg gagtgtgccc gctcccaggg cttccctgac
                                                                      4920
acctaccggc tcttcggcaa catcctggac aagcaccggc aggtgggcaa tgccgtgcca
                                                                      4980
ccgcccctgg ccaaagccat tggcttggag atcaagcttt gtatgttggc caaagcccga
                                                                      5040
gagagtgcct cagctaaaat aaaggaggag gaagctgcta aggactagtt ctgccctccc
                                                                      5100
gtcacccctg tttctggcac caggaatccc caacatgcac tgatgttgtg tttttaacat
                                                                      5160
gtcaatctgt ccgttcacat gtgtggtaca tggtgtttgt ggccttggct gacatgaagc
                                                                      5220
tgttgtgtga ggttcgctta tcaactaatg atttagtgat caaattgtgc agtactttgt
                                                                      5280
gcattctgga ttttaaaagt tttttattat gcattatatc aaatctacca ctgtatgagt
                                                                      5340
ggaaattaag actitatgta gtttttatat gttgtaatat ttcttcaaat aaatctctcc
                                                                      5400
tataaaccaa aaaaaaaaaa aaaaaaaaaa aaaa
                                                                      5434
       382
1939
DNA
Homo sapiens
<400> 382
cgcagagcag ttcagttcgc tcactcctcg ccggccgcct ctccttcggg ctctcctcgc
                                                                        60
gtcactggag ccatggcgtt cgccgagacc tacccggcgg catcctccct gcccaacggc
                                                                       120
gattgcggcc gccccagggc ggccggagga aaccgggtga cggtggtgct cggtqcqcaq
                                                                       180
tggggcgacg aaggcaaagg gaaggtggtg gacctgctgg cgcaggacgc cgacatcgtg
                                                                       240
tgccgctgcc agggaggaaa taatgctggc catacagttg ttgtggattc tgtggaatat
                                                                       300
gattttcatc tcttacccag tggaataatt aatccaaatg tcactgcatt cattggaaat
                                                                       360
ggtgtggtaa ttcatctacc tggattgttt gaagaagcag agaaaaatgt tcaaaaagga
                                                                       420
aaaggactag aaggctggga aaaaaggctt attatatctg acagagctca tattgtattt
                                                                       480
gattttcatc aagcagctga tggtatccag gaacaacaga gacaagaaca agcaggaaaa
                                                                       540
aatttgggta caacaaaaa gggcattggc ccagtttatt cgtccaaagc tgctcggagt
                                                                       600
ggactcagga tgtgcgacct tgtttctgac tttgatggct tctctgagag gtttaaagtt
                                                                       660
ctagctaacc aatacaaatc tatatacccc actttggaaa tagacattga aggtgaatta
                                                                       720
caaaaactca agggttatat ggaaaagatt aaaccaatgg tgagagatgg agtttatttt
                                                                       780
ctatatgagg ccctacatgg accaccaaag aaaatcttgg tagaaggtgc aaatgcagca
                                                                      840
ctattagata ttgattttgg gacttaccct tttgtaacct cttcaaattg tactgttgga
                                                                      900
ggtgtttgta ctggtttggg tatgccacct caaaatgttg gagaagtgta tggagttgtg
                                                                      960
aaagettata caactagagt tggtattggt geettteeta cagageaaga caatgaaatt
                                                                     1020
ggagaattat tacaaacaag gggtagagag tttggtgtaa ctactggaag gaaaagaaga
                                                                     1080
tgtggctggt tggacctcgt tttgctcaaa tatgctcata tgatcaatgg atttactgcg
                                                                     1140
ttggcactta ccaagttgga tattttggac atgtttacgg aaatcaaagt tggagttgct
                                                                     1200
tacaagttag atggtgaaat catacctcat atcccagcaa accaagaagt cttaaataaa
                                                                     1260
```

```
gttgaagttc aatataagac tctcccagga tggaacacag acatatcaaa tgcaagggcg
                                                                    1320
tttaaagaac tacctgttaa tgcacaaaac tatgttcgat ttattgaaga tgagcttcaa
                                                                    1380
attccagtta agtggattgg tgttggtaaa tccagagaat ctatgattca actcttttaa
                                                                    1440
tgattgccag taatgcaaga aacactcctt gagagggagg ggaaaagact ttctaaatat
                                                                    1500
ttcatttatg acctgcaaat tcaagaataa agacactgaa gtaagtttga agcctctaca
                                                                    1560
gttgtttcca gtcttttcag atggatgcct actgtggaga ttaactttgg catattccag
                                                                    1620
tgtcagcttt ctttagctgg aattgccaaa tcatttgttg ctcctgctgc tctcatggtg
                                                                    1680
ccacgttttt ttttttcaat gtttagtaat agtataatcc atgttgtttg atatcaaaag
                                                                    1740
tagaattact tttatgtagt tttcttcatt attgtcattg cgtgttctta agttttaccc
                                                                    1800
ctattagatg gtaagaacaa ttaatgcagt tttgcacaaa tatttttaca ttctgatcat
                                                                    1860
tcagttctgt cattgtaatc tttgttgtta gaaacaaatg atgaaaacat aggggttctg
                                                                    1920
taaacttttg taatgctat
                                                                    1939
      383
1817
DNA
Homo sapiens
<400> 383 ctgtcagaat ggccaccatg gtaccatccg tgttgtggcc cagggcctgc tggactctgc
                                                                      60
tggtctgctg tctgctgacc ccaggtgtcc aggggcagga gttccttttg cgggtggagc
                                                                     120
eccagaacce tgtgetetet getggagggt ecctgtttgt gaactgeagt actgattgte
                                                                     180
ccagctctga gaaaatcgcc ttggagacgt ccctatcaaa ggagctggtg gccagtggca
                                                                     240
tgggctgggc agccttcaat ctcagcaacg tgactggcaa cagtcggatc ctctgctcag
                                                                     300
tgtactgcaa tggctcccag ataacaggct cctctaacat caccgtgtac gggctcccgg
                                                                     360
agegtgtgga getggeacce etgeeteett ggeageeggt gggeeagaae tteaccetge
                                                                     420
gctgccaagt ggagggtggg tcgccccgga ccagcctcac ggtggtgctg cttcgctggg
                                                                     480
aggaggaget gageeggeag eeegeagtgg aggageeage ggaggteaet geeaetgtge
                                                                     540
tggccagcag agacgaccac ggagcccctt tctcatgccg cacagaactg gacatgcagc
                                                                     600
cccaggggct gggactgttc gtgaacacct cagccccccg ccagctccga acctttgtcc
                                                                     660
tgcccgtgac cccccgcgc ctcgtggccc cccggttctt ggaggtggaa acgtcgtggc
                                                                     720
eggtggaetg caccetagae gggettttte cageeteaga ggeecaggte tacetggege
                                                                     780
tgggggacca gatgctgaat gcgacagtca tgaaccacgg ggacacgcta acggccacag
                                                                     840
ccacagccac ggcgcgcgcg gatcaggagg gtgcccggga gatcgtctgc aacgtgaccc
                                                                     900
tagggggcga gagacgggag gcccgggaga acttgacggt ctttagcttc ctaggaccca
                                                                     960
ttgtgaacet cagegageee acegeecatg aggggteeae agtgaeegtg agttgeatgg
                                                                    1020
ctggggctcg agtccaggtc acgctggacg gagttccggc cgcggccccg gggcagccag
                                                                    1080
ctcaacttca gctaaatgct accgagagtg acgacggacg cagcttcttc tgcagtgcca
                                                                    1140
etetegaggt ggaeggegag ttettgeaca ggaacagtag egtecagetg egagteetgt
                                                                    1200
atggtcccaa aattgaccga gccacatgcc cccagcactt gaaatggaaa gataaaacga
                                                                    1260
gacacgtcct gcagtgccaa gccaggggca acccgtaccc cgagctgcgg tgtttgaagg
                                                                    1320
aaggeteeag eegggaggtg eeggtgggga teeegttett egteaaegta acacataatg
                                                                    1380
gtacttatca gtgccaagcg tccagctcac gaggcaaata caccctggtc gtggtgatgg
                                                                    1440
acattgaggc tgggagctcc cactttgtcc ccgtcttcgt ggcggtgtta ctgaccctgg
                                                                    1500
gegtggtgae tategtaetg geettaatgt aegtetteag ggageaecaa eggageggea
                                                                    1560
gttaccatgt tagggaggag agcacctatc tgcccctcac gtctatgcag ccgacagaag
                                                                    1620
caatggggga agaaccgtcc agagctgagt gacgctggga tccggggatca aagttggcgg
                                                                    1680
gggcttggct gtgccctcag attccgcacc aataaagcct tcaaactccc taaaaaaaaa
                                                                    1740
1800
aaaaaaaaa aaaaaaa
                                                                    1817
```

```
Homo sapiens
<400> 384
atccaataca ggagtgactt ggaactccat tctatcacta tgaagaaaag tggtgttctt
                                                                       60
ttcctcttgg gcatcatctt gctggttctg attggagtgc aaqqaacccc aqtaqtqaqa
                                                                      120
aagggteget gtteetgeat eageaceaac caagggacta tecacetaca atcettgaaa
                                                                      180
gaccttaaac aatttgcccc aagcccttcc tgcgagaaaa ttgaaatcat tgctacactg
                                                                      240
aagaatggag ttcaaacatg tctaaaccca gattcagcag atgtgaagga actgattaaa
                                                                      300
aagtgggaga aacaggtcag ccaaaagaaa aagcaaaaga atgggaaaaa acatcaaaaa
                                                                      360
aagaaagttc tgaaagttcg aaaatctcaa cgttctcgtc aaaagaagac tacataagag
                                                                      420
accacttcac caataagtat tctgtgttaa aaatgttcta ttttaattat accqctatca
                                                                      480
ttccaaagga ggatggcata taatacaaag gcttattaat ttgactagaa aatttaaaac
                                                                      540
attactctga aattgtaact aaagttaqaa aqttqatttt aaqaatccaa acgttaaqaa
                                                                      600
ttgttaaagg ctatgattgt ctttgttctt ctaccaccca ccagttgaat ttcatcatgc
                                                                      660
ttaaggccat gattttagca atacccatgt ctacacagat gttcacccaa ccacatccca
                                                                      720
ctcacaacag ctgcctggaa gagcagccct aggcttccac gtactgcagc ctccagagag
                                                                      780
tatctgaggc acatgtcagc aagtcctaag cctgttagca tgctggtgag ccaagcagtt
                                                                      840
tgaaattgag ctggacctca ccaagctgct gtggccatca acctctgtat ttgaatcagc
                                                                      900
ctacaggcct cacacacaat gtgtctgaga gattcatgct gattgttatt gggtatcacc
                                                                      960
actggagate accagtgtgt ggettteaga geeteettte tggetttgga ageeatgtga
                                                                     1020
ttccatcttg cccgctcagg ctgaccactt tatttctttt tgttcccctt tgcttcattc
                                                                     1080
aagtcagete ttetecatee taccacaatg cagtgeettt ettetetea gtgeacetgt
                                                                     1140
catatgetet gatttatetg agteaactee ttteteatet tgteeceaac acceeacaqa
                                                                     1200
agtgctttct tctcccaatt catcctcact cagtccagct tagttcaagt cctgcctctt
                                                                     1260
aaataaacct ttttggacac acaaattatc ttaaaactcc tgtttcactt ggttcagtac
                                                                     1320
cacatgggtg aacactcaat ggttaactaa ttcttgggtg tttatcctat ctctccaacc
                                                                     1380
agattgtcag ctccttgagg gcaagagcca cagtatattt ccctgtttct tccacagtgc
                                                                     1440
ctaataatac tgtggaacta ggttttaata attttttaat tgatgttgtt atgggcagga
                                                                     1500
tggcaaccag accattgtct cagagcaggt gctggctctt tcctqqctac tccatqttqq
                                                                     1560
ctagcctctg gtaacctctt acttattatc ttcaggacac tcactacagg gaccagggat
                                                                     1620
gatgcaacat cettgtettt ttatgacagg atgtttgete agetteteca acaataaqaa
                                                                     1680
gcacgtggta aaacacttgc ggatattctg gactgttttt aaaaaatata cagtttaccg
                                                                     1740
aaaatcatat aatcttacaa tgaaaaggac tttatagatc agccagtgac caaccttttc
                                                                     1800
ccaaccatac aaaaattcct tttcccgaag gaaaagggct ttctcaataa gcctcagctt
                                                                     1860
tctaagatct aacaagatag ccaccgagat ccttatcgaa actcatttta ggcaaatatg
                                                                     1920
agttttattg tccgtttact tgtttcagag tttgtattgt gattatcaat taccacacca
                                                                     1980
teteceatga agaaagggaa eggtgaagta etaagegeta gaggaageag eeaagteggt
                                                                     2040
tagtggaagc atgattggtg cccagttagc ctctgcagga tgtggaaacc tccttccagg
                                                                     2100
ggaggttcag tgaattgtgt aggagaggtt gtctgtggcc agaatttaaa cctatactca
                                                                     2160
ctttcccaaa ttgaatcact gctcacactg ctgatgattt agagtgctqt ccgqtqqaqa
                                                                     2220
teccaecega aegtettate taateatgaa aeteeetagt teetteatgt aaetteeetg
                                                                     2280
aaaaatctaa gtgtttcata aatttgagag tctgtgaccc acttaccttg catctcacag
                                                                     2340
gtagacagta tataactaac aaccaaagac tacatattgt cactgacaca cacgttataa
                                                                     2400
tcatttatca tatataca tacatgcata cactctcaaa gcaaataatt tttcacttca
                                                                     2460
aaacagtatt gacttgtata ccttgtaatt tgaaatattt tctttgttaa aatagaatgg
                                                                     2520
tatcaataaa tagaccatta atcaq
                                                                     2545
```

<210> 385 <211> 599

<212> DNA <213> Homo sapiens	
<400> 385 cgggacgcgg atgcagacgc aggcggaggc gctgacggcg gggatggccg gggtggccac	60
agetgeegeg ggggegtgga cacageegea geteeggeeg gtggagetee eecagegeac	120
gegecaggte egggeagaga egeegegtet geegeagggg gteaegaatg eggeegeaca	180
tattcaccct cagcgtgcct ttcccgaccc ccttggaggc ggaaatcgcc catgggtccc	240
tggcaccaga tgccgagccc caccaaaggg tggttgggaa ggatctcaca gtgagtggca	300
ggatcctggt cgtccgctgg aaagctgaag actgtcgcct gctccgaatt tccgtcatca	360
actttcttga ccagctttcc ctggtggtgc ggaccatgca gcgctttggg cccccgttt	420
cccgctaagc ctggcctggg caaatggagc gaggtcccac tttgcgtctc cttgtaggca	480
gtgcgtccat ccttccctag ggcaggaatt cccacagttg ctactttcct gggagggcct	540
catgttttat ctggttctta aatgtttgtt actacagaaa ataaaactga ggtattatt	599
<210> 386 <211> 1882 <212> DNA <213> Homo sapiens	
<400> 386 gggcaggaag acggcgctgc ccggaggagc ggggcgggcg ggcgcgcggg ggagcgggcg	60
gcgggcggga gccaggcccg ggcgggggcg ggggcggcgg ggccagaaga ggcggcgggc	120
cgcgctccgg ccggtctgcg gcgttggcct tggctttggc tttggcggcg gcggtggaga	180
agatgctgca gtccctggcc ggcagctcgt gcgtgcgcct ggtggagcgg caccgctcgg	240
cctggtgctt cggcttcctg gtgctgggct acttgctcta cctggtcttc ggcgcagtgg	300
tetteteete ggtggagetg eestatgagg acetgetgeg ceaggagetg egcaagetga	360
agcgacgctt cttggaggag cacgagtgcc tgtctgagca gcagctggag cagttcctgg	420
gccgggtgct ggaggccagc aactacggcg tgtcggtgct cagcaacgcc tcgggcaact	480
ggaactggga cttcacctcc gcgctcttct tcgccagcac cgtgctctcc accacaggtt	540
atggccacac cgtgcccttg tcagatggag gtaaggcctt ctgcatcatc tactccgtca	600
ttggcattcc cttcaccctc ctgttcctga cggctgtggt ccagcgcatc accgtgcacg	660
tcacccgcag gccggtcctc tacttccaca tccgctgggg cttctccaag caggtggtgg	720
ccatcgtcca tgccgtgctc cttgggtttg tcactgtgtc ctgcttcttc ttcatcccgg	780
ccgctgtctt ctcagtcctg gaggatgact ggaacttcct ggaatccttt tatttttgtt	840
ttatttccct gagcaccatt ggcctggggg attatgtgcc tgggggaaggc tacaatcaaa	900
aattcagaga gctctataag attgggatca cgtgttacct gctacttggc cttattgcca	960
tgttggtagt tctggaaacc ttctgtgaac tccatgagct gaaaaaattc agaaaaatgt	1020
tctatgtgaa gaaggacaag gacgaggatc aggtgcacat catagagcat gaccaactgt	1080
cetteteete gateacagae caggeagetg geatgaaaga ggaceagaag caaaatgage	1140
cttttgtggc cacccagtca tctgcctgcg tggatggccc tgcaaaccat tgagcgtagg	1200
attigtigca tiatgciaga gcaccagggi cagggigcaa ggaagaggci taagtatgti	1260
catttttatc agaatgcaaa agcgaaaatt atgtcacttt aagaaatagc tactgtttgc	1320
aatgtettat taaaaaacaa caaaaaaaga cacatggaac aaagaagetg tgaccccage	1380
aggatgtcta atatgtgagg aaatgagatg tccacctaaa attcatatgt gacaaaatta	1440
tetegacett acataggagg agaatacttg aagcagtatg etgetgtggt tagaagcaga	1500
ttttatactt ttaactggaa actttggggt ttgcatttag atcatttagc tgatggctaa	1560
atagcaaaat ttatatttag aagcaaaaaa aaaaagcata gagatgtgtt ttataaatag gtttatgtgt actggtttgc atgtacccac ccaaaatgat tatttttgga gaatctaagt	1620 1680
caaactcact atttataatg cataggtaac cattaactat gtacatataa agtataaata	1740
tgtttatatt ctgtacatat ggtttaggtc accagatcct agtgtagttc tgaaactaag	1800
actatagata tittgttict tittgattict cittatacta aagaatccag agtigctaca	1860
ataaaataag gggaataata aa	1882
5 555	1002

```
387
4068
DNA
Homo sapiens
aacagacaca gactegeagg ceetetteat tetaaageaa gggteeaaaa eettttttet
                                                                       60
ataaagggcc agagagtaaa taatttaggc tttgtgagcc aggcagtctg ttgcagctac
                                                                      120
gcagtccttg gttattatag tgcaaaaaca gccataggca gcatgtacag aaatgagcat
                                                                      180
aaccatgctc caacaaaact ttatttacag gcactaatgt ttaaatttca ggtaattttc
                                                                      240
acatgtcaca aaatatcact tttctttaac cacttaaaag tataaaagcc attcttagtt
                                                                      300
tgcaggcagt acagaaacag tttcagccca tgggctgtca tttgttgacc cctattcaag
                                                                      360
agggtctgtc acagaagact cctgcttgcc tgaaatttac gagtgcatgt aaatgttgga
                                                                      420
attaacaggt gtgcctgttt tctcttatgc tgtctttcat cttcaggaac agccaggaag
                                                                      480
acgctgcact tcgagatttc caaggaaggc agtgacctgt cagtggtgga gcgtgcagaa
                                                                      540
gtctggctct tcctaaaagt ccccaaggcc aacaggacca ggaccaaagt caccatccgc
                                                                      600
ctcttccagc agcagaagca cccgcagggc agcttggaca caggggaaga ggccgaggaa
                                                                      660
gtgggcttaa agggggagag gagtgaactg ttgctctctg aaaaagtagt agacgctcgg
                                                                      720
aagagcacct ggcatgtett eeetgtetee agcageatee ageggttget ggaccaggge
                                                                      780
aagagctccc tggacgttcg gattgcctgt gagcagtgcc aggagagtgg cgccagcttg
                                                                      840
gttctcctgg gcaagaagaa gaagaaagaa gaggaggggg aagggaaaaa gaagggcgga
                                                                      900
ggtgaaggtg gggcaggagc agatgaggaa aaggagcagt cgcacagacc tttcctcatg
                                                                      960
ctgcaggccc ggcagtctga agaccaccct catcgccggc gtcggcgggg cttggagtgt
                                                                     1020
gatggcaagg tcaacatctg ctgtaagaaa cagttctttg tcagtttcaa ggacatcggc
                                                                     1080
tggaatgact ggatcattgc tccctctggc tatcatgcca actactgcga gggtgagtgc
                                                                     1140
ccgagccata tagcaggcac gtccgggtcc tcactgtcct tccactcaac agtcatcaac
                                                                     1200
cactacegea tgeggggeea tageeeettt gecaacetea aategtgetg tgtgeeeaee
                                                                     1260
aagctgagac ccatgtccat gttgtactat gatgatggtc aaaacatcat caaaaaggac
                                                                     1320
attcagaaca tgatcgtgga ggagtgtggg tgctcataga gttgcccagc ccagggggaa
                                                                     1380
agggagcaag agttgtccag agaagacagt ggcaaaatga agaaattttt aaggtttctg
                                                                     1440
agttaaccag aaaaatagaa attaaaaaca aaacaaaaaa aaaaacaaaa aaaaacaaaa
                                                                     1500
gtaaattaaa aacaaaacct gatgaaacag atgaaggaag atgtggaaaa aatccttagc
                                                                     1560
cagggctcag agatgaagca gtgaaagaga caggaattgg gagggaaagg gagaatggtg
                                                                     1620
taccetttat ttettetgaa ateaeaetga tgaeateagt tgtttaaaeg gggtattgte
                                                                     1680
ctttcccccc ttgaggttcc cttgtgagcc ttgaatcaac caatctagtc tgcagtagtg
                                                                     1740
tggactagaa caacccaaat agcatctaga aagccatgag tttgaaaggg cccatcacag
                                                                     1800
gcactttcct acccaattac ccaggtcata aggtatgtct gtgtgacact tatctctgtg
                                                                     1860
tatatcagca tacacacaca cacacacaca cacacacaca ggcatttcca cacattacat
                                                                     1920
atatacacat actggtaaaa gaacaatcgt gtgcaggtgg tcacacttcc tttttctgta
                                                                     1980
ccacttttgc aacaaacaa aacaaacaac attaaaaaat tgagaacaag tatggaaaga
                                                                     2040
atgaaagatc aaggaaaaaa gaataccaag ttacatttcg ttaaggtgct tatgatctta
                                                                     2100
gaactatgca acctaatagg tttgaaactg tttacctgag agagaacaaa aagagagact
                                                                     2160
tttttgtatt ggaagtaatc tgattaattt ttattttctt caaggagaga tacttgaaag
                                                                     2220
gaatatgttt gtccatctgt tggatccaaa catttctata ttttgtaaat gttgttgttg
                                                                     2280
ttttttttt aatcgtttac tatttgcact acaatggtgt ttgacctgtc taatccttat
                                                                     2340
ttaacaagta ttttctttgg ttgggggtgg gggtggggtt taagagctgc acttaatgtg
                                                                     2400
agctataaaa gaactgctac agcacacaaa atagctattt ttattattat aattataatt
                                                                     2460
attattatta ttttgtacct taaaaaatag acacatacac caaagacatt tgtgtgagcc
                                                                     2520
tttaaacagt ctgtctgtgg ttggtatcat tcaccatcaa tgagtcaggg gttgggattc
                                                                     2580
aaggttgagt agtgtggatt gtgttcaggc ttaaaagacc tgagaagttt ggtttttgac
                                                                     2640
```

```
teettttaca teeatgaaac aggacattte atactggatg tacagtagtt gtacactgtt
                                                                     2700
ggatatcaag ttcaatcaaa ttcatggaac tacatgcttg tatgtgtata tatacattgc
                                                                     2760
ttgtgcatat gcatatctgt atgtatatat acatgtattg taccatgtcc atacacattt
                                                                     2820
taagcacttc aggctgtcat tttttaatgt tcttaaagca atgaatgttt gtgtgcaaaa
                                                                     2880
cacagtattt ttaagaagga taggctatag tttttgcttt tactctqaac taggtqqqcq
                                                                     2940
catttcaaaa attcggatgg gaaaaagcct ggaaattcca gtgaatattc agcaaggcc
                                                                     3000
tettteattg tacagggate aaattteete etettttttg tgeeecetee eaettetaca
                                                                     3060
agttatcccc tgtggggaaa acaggatgat aatcaaaact ctgggctgat gtttttccaa
                                                                     3120
cttagtgtct attggaatca atcttaaatc agaagctttt tcagaaaaat aatatttagg
                                                                     3180
ccagaattag agttgagtgt attttttaaa aatgattaag gcttggttgt gagaaatatt
                                                                     3240
acctgtacca gctgggaaaa ataatgtcat cactaactaa aagataatta atttgagaga
                                                                     3300
aagtgttaag agagggagag taaggaagag aacagttaag aggaggcaga ggtgagggca
                                                                     3360
gtagtaaaaa tctctaaaat tttaatttac agccaaaatt cttcatgtgt aaatttgtat
                                                                     3420
tgattcagat gcagaaatga aaaaaaaaca cctttgtttt ataaatatca aagtacatgc
                                                                     3480
ttaaagccaa gtttttatct agtttattct agtacttagc ttgcctqqaa taqctaataa
                                                                     3540
attattcatg tatgtgcttt tgaaaatcca gagccctatt tttacacact tgtgtgaagt
                                                                     3600
tggcaaacat tttgaaaaat ggaaaaaagt ttctaataat tgggaacaat tacattaatt
                                                                     3660
aatattttgt aaaatattga agcttttagc cctatgtcaa tttgtagatt aaaataaatt
                                                                     3720
aattatagga aaggaagata acagtgagaa accaaacatt acaaaaggtg gtttagctct
                                                                     3780
ccttgaaaaa tatactaagt tggtatacta taacacttgg ctatatgtag gcaatgtcac
                                                                     3840
tactgggcaa atacacttac tgtgttctag aggcagccct ttcttatgca gaaaatacaa
                                                                     3900
tacgcactgc atgagaagct tgagagtgga ttctaatcca ggtctgtcga ccttggatat
                                                                     3960
catgcatgtg ggaaggtggg tgtggtgaga aaagttttaa ggcaagagta gatggccatg
                                                                     4020
ttcaacttta caaaatttct tggaaaactg gcagtatttt gaactgca
                                                                     4068
       388
2850
DNA
Homo sapiens
cgcgagcagg agacggcggc gggcgaaccc tgctgggcct ccagtcaccc tcgtcttgca
                                                                       60
ttttcccgcg tgcgtgtgtg agtgggtgtg tgtgttttct tacaaagggt atttcqcqat
                                                                      120
cgatcgattg attcgtagtt cccccccgcg cgcctttgcc ctttgtgctg taatcgagct
                                                                      180
cccgccatcc caggtgcttc tccgttcctc taaacgccag cgtctggacg tgagcgcagg
                                                                      240
tegeeggttt gtgeettegg teeeegette geeeeetgee gteeeeteet tateaeggte
                                                                      300
cegetegegg cetegeegee eegetgtete egeegeeege catggegaet gegaeeeeeg
                                                                      360
tgccgccgcg gatgggcagc cgcgctggcg gccccaccac gccgctgagc cccacgcgcc
                                                                      420
tgtcgcggct ccaggagaag gaggagctgc gcgagctcaa tgaccggctg gcggtgtaca
                                                                      480
tegacaaggt gegeageetg gagaeggaga acagegeget geagetgeag gtgaeggage
                                                                      540
gcgaggaggt gcgcggccgt gagctcaccg gcctcaaggc gctctacgag accgagctgg
                                                                      600
cegacgegeg aegegegete gacgacaegg ceegegageg egecaagetg cagategage
                                                                      660
tgggcaagtg caaggcggaa cacgaccagc tgctcctcaa ctatgctaag aaggaatctg
                                                                      720
atcttaatgg cgcccagatc aagcttcgag aatatgaagc agcactgaat tcgaaagatg
                                                                      780
cagetettge tactgeactt ggtgacaaaa aaagtttaga gggagatttg gaggatetga
                                                                      840
aggatcagat tgcccagttg gaagcctcct tagctgcagc caaaaaacag ttagcaqatq
                                                                      900
aaactttact taaagtagat ttggagaatc gttgtcagag ccttactgag gacttggagt
                                                                      960
ttcgcaaaag catgtatgaa gaggagatta acgagaccag aaggaagcat gaaacgcgct
                                                                     1020
tggtagaggt ggattctggg cgtcaaattg agtatgagta caagctggcg caagcccttc
                                                                     1080
atgagatgag agagcaacat gatgcccaag tgaggctgta taaggaggag ctggaqcaqa
                                                                     1140
cttaccatgc caaacttgag aatgccagac tgtcatcaga gatgaatact tctactgtca
                                                                     1200
```

```
acagtgccag ggaagaactg atggaaagcc gcatgagaat tgagagcctt tcatcccagc
                                                                    1260
tttctaatct acagaaagag tctagagcat gtttggaaag gattcaagaa ttagaggact
                                                                    1320
tgcttgctaa agaaaaagac aactctcgtc gcatgctgac agacaaagag agaqaqatqq
                                                                    1380
cggaaataag ggatcaaatg cagcaacagc tgaatgacta tgaacagctt cttgatgtaa
                                                                    1440
agttagccct ggacatggaa atcagtgctt acaggaaact cttagaaggc gaagaagaga
                                                                    1500
ggttgaagct gtctccaagc ccttcttccc gtgtgacagt atcccgagca tcctcaagtc
                                                                    1560
gtagtgtacg tacaactaga ggaaagcgga agagggttga tgtggaagaa tcagaggcga
                                                                    1620
gtagtagtgt tagcatetet eatteegeet eagecaetgg aaatgtttge ategaagaaa
                                                                    1680
ttgatgttga tgggaaattt atccgcttga agaacacttc tgaacaggat caaccaatqq
                                                                    1740
gaggctggga gatgatcaga aaaattggag acacatcagt cagttataaa tatacctcaa
                                                                    1800
gatatgtgct gaaggcaggc cagactgtta caatttgggc tgcaaacgct ggtgtcacaq
                                                                    1860
ccagccccc aactgacctc atctggaaga accagaactc gtggggcact ggcgaagatg
                                                                    1920
tgaaggttat attgaaaaat tctcagggag aggaggttgc tcaaagaagt acagtcttta
                                                                    1980
aaacaaccat acctgaagaa gaggaggagg aggaagaagc agctggagtg gttgttgagg
                                                                    2040
aagaactttt ccaccagcag ggaaccccaa gagcatccaa tagaagctgt gcaattatgt
                                                                    2100
aaaattttca actgtcttcc tcaaaataaa gaagtatggt aatctttacc tgtatacagt
                                                                    2160
gcagagcctt ctcagaagca cagaatattt ttatatttcc tttatgtgaa tttttaagct
                                                                    2220
gcaaatctga tggccttaat ttcctttttg acactgaaag ttttgtaaaa gaaatcatgt
                                                                    2280
ccatacactt tgttgcaaga tgtgaattat tgacactgaa cttaataact gtgtactgtt
                                                                    2340
cggaaggggt tcctcaaatt ttttgacttt ttttgtatgt gtgttttttc ttttttta
                                                                    2400
agttettatg aggagggag ggtaaataaa ceaetgtgeg tettggtgta atttgaagat
                                                                    2460
tgccccatct agactagcaa tctcttcatt attctctgct atatataaaa cggtgctgtg
                                                                    2520
agggagggga aaagcatttt tcaatatatt gaacttttgt actgaatttt tttgtaataa
                                                                    2580
gcaatcaagg ttataatttt ttttaaaata gaaattttgt aagaaggcaa tattaaccta
                                                                    2640
atcaccatgt aagcactctg gatgatggat tccacaaaac ttggttttat ggttacttct
                                                                    2700
tctcttagat tcttaattca tgaggagggt gggggaggga ggtggaggga gggaagggtt
                                                                    2760
tetetattaa aatgeatteg tigtgittit taagatagig taaetigeti aaattietta
                                                                    2820
tgtgacatta acaaataaaa aagctctttt
                                                                    2850
      389
1098
DNA
Homo sapiens
<400> 389
atgtcagece caetggatge egecetecae gecetteagg aggageagge cagacegece
                                                                      60
tccacgccct tcaggaggag caggccagac tcaagatgag gctgtgggac ctgcagcagc
                                                                     120
tgagaaagga gctcggggac tcccccaaag acaaggtccc attttcagtg cccaagatcc
                                                                     180
ccctggtatt ccgaggacac acccagcagg acccggaagt gcctaagtct ttagtttcca
                                                                     240
300
aagtggctga gcaggtgctg caacaaaagg agcacacgat caacatggag gagtgccggc
                                                                     360
tgcgggtgca ggtccagccc ttggagctgc ccatggtcac caccatccag gtgatggtgt
                                                                     420
ccagccagtt gagtggccgg agggtgttgg tcactggatt tcctgccagc ctcaggctga
                                                                     480
gtgaggagga gctgctggac aagctagaga tcttctttgg caagactagg aacggaggtg
                                                                     540
gcgatgtgga cgttcgggag ctactgccag ggagtgtcat gctggggttt gctagggatg
                                                                     600
gagtggctca gcgtctgtgc caaatcggcc agttcacagt gccactgggt gggcagcaag
                                                                     660
tecetetgag agteteteeg tatgtgaatg gggagateea gaaggetgag ateaggtege
                                                                     720
agccagttcc ccgctcggta ctggtgctca acattcctga tatcttggat ggcccggagc
                                                                     780
tgcatgacgt cctggagatc cacttccaga agcccacccg cgggggcggg gaggtagagg
                                                                     840
ccctgacagt cgtaccccaa ggacagcagg gcctagcagt cttcacctct gagtcaggct
                                                                     900
aggggcctcc ccttctcatc ctccccaccc ccccgccaag gttctcacac tggcctgggc
                                                                     960
```

ttgggtgccc atataggagg aaaacactgc ccagaacagt				_	1020 1080
aaaaaaaaaa aaaaaaaa	aaaaagagoo	ogodogoodd	addaddaddad	aaaaaaaaaa	1098
					1000
<210> 390 <211> 860 <212> DNA <213> Homo sapiens					
<400> 390 gactctcact gtcattgcag	aaaactcttc	tacagaaatt	actctcaaag	aaacctgagg	60
atcgacctaa cacatctgaa			_		120
aaaatgaacg acacacatgt					180
ttttccttaa attatctaaa					240
aatgtttcct ttaatttttt					300
cttctttttg cttcaaaaac					360
ttttttttt ttttaaagac					420
agtcttggct cactgcaact					480
ctgagtagct ggattacagg					540
agacagggtt tcaccatgtt					600
			-	-	
tattattat aaagatagaa				_	660
tctttgttct aaagatggaa				_	720
aatcaattca tatctattta					780
gttctctgcc tcacatagct		etggagaaat	atggtactca	ttaaaaaaaa	840
aaaaaaagtg atgtacaacc					860
<210> 391 <211> 921 <212> DNA <213> Homo sapiens					
<400> 391 ccctcggacg gccccggagg	atgctgctga	gccccggcac	tgcctggctg	cgagcacatg	60
atggcgatac gggagctcaa					120
atcgtgtgtc gatttgtcca					180
tcttttatga ccaaaactgt					240
actgctggtc aggaacggtt					300
gctgttatcg tgtatgatat					360
aaggagctga aagaacatgg					420
gacctctcag atattaggga					480
ggtgccatcg tggttgagac					540
ggaatcagcc gccagatccc					600
aaagttgaga agccaaccat					660
cacggtactt gaagaagcca					720
gtggcctggc acctcacttt					780
gcaggggggg gggcaggaaa					840
cacaccacca caaaatggcc					900
ttttgctaaa aaaaaaaaaa		gaaaogoaoa	cggagggac	geageegeae	921
	<b>~</b>				221
<210> 392 <211> 282 <212> DNA <213> Homo sapiens					
<400> 392 gagaaatgaa gtaataatga	attggcaaat	cgaatgtctt	tattttatac	tgagggaagt	60
ccaatgctga aaaccttgag					120
ccaatagaaa ataccacaga					180
	Juguetaage	acaacyycia	grycacycay	agreatycty	100

```
gaacaccggt atacaggagc aggtttacaa atggagagac agtgtcattc tqcttqaqqq
                                                                        240
taatggtggg tgtcataata ctctatgtcc acgtacatcc ag
                                                                        282
       DNA
Homo sapiens
agctgttggg accatectgg caacceeggt gtttggetgg gttetagegt ageegtetgt
                                                                         60
gttggccggt gggggacctg cgatcggagt gggaggccag tttgcaccaa ggaggtggaa
                                                                        120
ggaggcgggc ttttaggctg ggaagcgcct tagaggagcc atttttccag gatgcctggt
                                                                        180
ttgcttttat gtgaaccaac agagetttac aacateetga atcaggeeac aaaactetee
                                                                        240
agattaacag accccaacta tctctgttta ttggatgtcc gtgccaaatg ggagtatgac
                                                                        300
gaaagcaatg tgatcactgc ccttcgagtg aagaaggaaa ataatggata tctctcccqq
                                                                        360
agtctgtgga cctcgag
                                                                        377
       DNA
Homo sapiens
<400> 394
gagcaatacc tttctgtacc cgtggtgaga caagacccag agctactgga aaacaagcac
                                                                         60
tttggaagat ttgttttgtt ttcatggaat aataatatgt cagggtataa tttaacqtqa
                                                                        120
gtttcttatg tgcccttaaa gactgttaga caagaaaagc attcactggc taataatcca
                                                                        180
taggtcgacc tatgtcctaa gttaggtgta aggtccgatg ccttqqccac actcqaqctc
                                                                        240
tetttacatt gttagttgte aacettgget gatggaaate cegtaaceae tatttgttge
                                                                        300
actgtgccat gaagggcagc aggcccaagt gctgctctga ctgaaaactg agttaacaag
                                                                        360
atgaaatcta aaggatattc acagtgactt caattcagga agaatgcttc caaaagagcc
                                                                        420
cagtggggaa atctgacatc acagaagaca ttaattcagt cactttcaaa gagtttgtct
                                                                        480
acaggcggtt tctctgttat caaggcattt gaaataggat tttac
                                                                        525
       DNA
Homo sapiens
agctggagga tggcggtggg ggaggctgtc tttgtaccac tgcagcatcc cccacttctc
                                                                         60
cacggaagec ccateccaaa getgetgeet ggeeeettge tgtaaagtgt gaagggggeg
                                                                        120
gctgagttct cttaggaccc agagccaggg ccctcaactt ccatcctgcg ggaggccttg
                                                                        180
gegagacaet geeagtgtet tecagageea caeeeaggga ceaegggagg ateetqaeee
                                                                        240
ctgcaggget caggggtcag cagggaceca ctgccccate tecetetece caccaagaca
                                                                        300
gccccagaag gagcagccag ctgggatggg aacccaaggc tgtccacatc tggcttttgt
                                                                        360
gggactcaga aagggaagca gaactgaggg ctgggatat
                                                                        399
       396
241
DNA
Homo sapiens
<400> 396
tgtacctttg caaacttgtc tggattttga ctgtatgtgc aaaacagatt gtacttagcg
                                                                         60
attcattaaa catcttttga tcatctgctg tctgccaggc actgtgctag gcatctgaaa
                                                                        120
aacaaagatg gtccctgcag tttaatgtga agagctatct taattgtatt ccacaagtgt
                                                                        180
attggtcgta tctttgtttt ggtgtttcta cctaaataaa ttttatatta actaaaaaaa
                                                                        240
                                                                        241
       397
355
DNA
       Homo sapiens
<400>
       397
```

```
aatteggeae eagggggete egggtggetg etetgggaet gggeaeceae aagggeteag
                                                                       60
                                                                      120
tqqqcccaaa cccttgaaat ccgtgaaaca gggtggtccc aagagctaga aactcaggaa
                                                                      180
accocaqqtq ctcaqgqccc cgcgtctcgg gggctccgtg gggcagaccc ctgctaatat
                                                                      240
atgcaattct ccctcccca gcccttccct gacccctaag ttattgcccg ctcacctctc
                                                                      300
ccaggcccca ggctgcggac tggcagggtg gcgcctgcgg tttctatgta tttatagcaa
gttctgatgt acatatgtaa aggacttttt taaatatatg tgccttttgc ctact
                                                                      355
       398
456
DNA
       Homo sapiens
<400> 398 catatataca tgcagtctgc ttgattatca gcaaaatggt cagcctttat cagatagttt
                                                                       60
cttcatgtgg agttcatctg catgtggccc ttactctgaa gcctcttcct gatctggagc
                                                                      120
cacagtetgt etgtetteea gtteatetea gteetegaga aaggeeettt aaatatgtea
                                                                      180
                                                                      240
ctttcccatt ttcctttaac catgggttgt gtgagccaga aagagctttg agaaagatgg
ctgcttccac cagggtggag gcttctaggt ctgcatgatg atggggcccg tttctggcca
                                                                      300
gagggtggct ctgggagcag ttgtgctgcg ggcttgctgg gggagaactc taactgttgc
                                                                      360
                                                                      420
agaaacagag cttcatggct tgcttaaatt acttagctgg aatattttaa agtgtcagat
                                                                      456
aatgtgatgt acaaagagag tatgccgatg catttc
       399
470
DNA
Homo sapiens
<400> 399 tatcaaacta aagatgacat cttaattttg cattgaacat taatgtagcg gatataattt
                                                                       60
gatgattata cttcattaga tttaatttct aggccaagat gttacttttt aaagtgcagt
                                                                      120
ttaaggttca ggcatgcatt ctggctcata gtggttgaaa gtaatttaaa ttagtgggaa
                                                                      180
agtagcatgc ttgcatcaca tagagtgaga ttggtattca tttacctatg ttgcgccagt
                                                                      240
                                                                      300
ttgtgttgca gtttaccaat tcaatatagc cctgcattta aagttccttt ttaagatttg
tggattttat ttttattaag aacatagata tataaagtac tgtagtttac aggtaggcct
                                                                      360
420
                                                                      470
cacaatgtgg aaagctgata tacctgtgca aaatctttgc ctctgtgctg
       400
4207
DNA
Homo sapiens
<400> 400 ccccqqttcc qctqtctttt ctqtctacaq tttqcqatcc ccqcqtccaq gatqqaqcaq
                                                                       60
ctgaacgaac tggagctgct gatggagaag agtttttggg aggaggcgga gctgccggcg
                                                                      120
                                                                      180
gagetattte agaagaaagt ggtagettee ttteeaagaa cagttetgag cacaggaatg
gataaccggt acctggtgtt ggcagtcaat actgtacaga acaaagaggg aaactgtgaa
                                                                      240
                                                                      300
aagegeetgg teateactge tteacagtea etagaaaata aagaactatg cateettagg
aatgactggt gttctgttcc agtagagcca ggagatatca ttcatttgga gggagactgc
                                                                      360
acatctgaca cttggataat agataaagat tttggatatt tgattctgta tccagacatg
                                                                      420
                                                                      480
ctgatttctg gcaccagcat agccagtagt attcgatgta tgagaagagc tgtcctgagt
gaaactttta ggagctctga tccagccaca cgccaaatgc taattggtac ggttctccat
                                                                      540
                                                                      600
gaggtgtttc aaaaagccat aaataatagc tttgccccag aaaagctaca agaacttgct
                                                                      660
tttcaaacaa ttcaagaaat aagacatttg aaggaaatgt accgcttaaa tctaagtcaa
gatgaaataa aacaagaagt agaggactat cttccttcgt tttgtaaatg ggcaggagat
                                                                      720
                                                                      780
ttcatgcata aaaacacttc gactgacttc cctcagatgc agctctctct gccaagtgat
aatagtaagg ataattcaac atgtaacatt gaagtcgtga aaccaatgga tattgaagaa
                                                                      840
agcatttggt cccctaggtt tggattgaaa ggcaaaatag atgttacagt tggtgtgaaa
                                                                      900
```

atacatcgag	ggtataaaac	aaaatacaag	ataatgccgc	tggaacttaa	aactggcaaa	960
gaatcaaatt	ctattgaaca	ccgtagtcag	gttgttctgt	acactctact	aagccaagag	1020
agaagagctg	atccagaggc	tggcttgctt	ctctacctca	agactggtca	gatgtaccct	1080
gtgcctgcca	accatctaga	taaaagagaa	ttattaaagc	taagaaacca	gatggcattc	1140
tcattgtttc	accgtattag	caaatctgct	actagacaga	agacacagct	tgcttctttg	1200
ccacaaataa	ttgaggaaga	gaaaacttgt	aaatattgtt	cacaaattgg	caattgtgct	1260
ctttatagca	gagcagttga	acaacagatg	gattgtagtt	cagtcccaat	tgtgatgctg	1320
cccaaaatag	aagaagaaac	ccagcatctg	aagcaaacac	acttagaata	tttcagcctt	1380
tggtgtctaa	tgttaaccct	ggagtcacaa	tcgaaggata	ataaaaagaa	tcaccaaaat	1440
atctggctaa	tgcctgcttc	ggaaatggag	aagagtggca	gttgcattgg	aaacctgatt	1500
agaatggaac	atgtaaagat	agtttgtgat	gggcaatatt	tacataattt	ccaatgtaaa	1560
catggtgcca	tacctgtcac	aaatctaatg	gcaggtgaca	gagttattgt	aagtggagaa	1620
gaaaggtcac	tgtttgcttt	gtctagagga	tatgtgaagg	agattaacat	gacaacagta	1680
acttgtttat	tagacagaaa	cttgtcggtc	cttccagaat	caactttgtt	cagattagac	1740
caagaagaaa	aaaattgtga	tatagatacc	ccattaggaa	atctttccaa	attgatggaa	1800
aacacgtttg	tcagcaaaaa	acttcgagat	ttaattattg	actttcgtga	acctcagttt	1860
atatcctacc	ttagttctgt	tcttccacat	gatgcaaagg	atacagttgc	ctgcattcta	1920
aagggtttga	ataagcctca	gaggcaagcg	atgaaaaagg	tacttctttc	aaaagactac	1980
acactcatcg	tgggtatgcc	tgggacagga	aaaacaacta	cgatatgtac	tctcgtaaga	2040
attctctacg	cctgtggttt	tagcgttttg	ttgaccagct	atacacactc	tgctgttgac	2100
aatattcttt	tgaagttagc	caagtttaaa	ataggatttt	tgcgtttggg	tcagattcag	2160
aaggttcatc	cagctatcca	gcaatttaca	gagcaagaaa	tttgcagatc	aaagtccatt	2220
aaatccttag	ctcttctaga	agaactctac	aatagtcaac	ttatagttgc	aacaacatgt	2280
atgggaataa	accatccaat	attttcccgt	aaaatttttg	atttttgtat	tgtggatgaa	2340
	ttagccaacc					2400
	accatcagca					2460
	aaagcttatt					2520
	acagaatgaa					2580
	agtgtggatc					2640
	agctggaact					2700
	aacccaacaa					2760
	aaaaaggtgg					2820
	ttgttaaggc					2880
	taaagatcat					2940
	acaaatacca	_				3000
	atggaactgt					3060
	ccaaacataa	<del>-</del>				3120
	agaagctgct					3180
	atgaaagtct					3240
	ccttttcata	_				3300
	atacaaaatt					3360
	gtctgaattt		=			3420
	atttttacca			<del>-</del>		3480
-	gacatttcag			-	_	3540
-	gaataaaggg	_	<del>-</del> -	_	<del>-</del>	3600
	aagtgtgatt			-		3660
	tttctgctat					3720
	ttcctgttaa			_		3780
-	_					

```
tattcagtat ttcagtattc tagagtagat tttgatataa aagaaaataa ttcttacatc
                                                                         3840
atcttttgca acaaattttg ttttctgaat tgataataaa tttaaaaagt tgattcctat
                                                                         3900
tttcacatat gttcatatgc ccctatgttt gggggtatca ctcagttttc ccttttttgt
                                                                         3960
qtaaaqatqt tttqtaaaac aaaattqtct caaagtgatt atattatata tataaaaagt
                                                                         4020
aacaqatttt aacaaaggtt aaaagattct tggggtaaca gattcttctg gggttggaaa
                                                                         4080
tcttccattt ctcttqaqqq ttttttttaa tgagtgttaa atatgttaaa atttttattt
                                                                         4140
ctacctcatg tgttttttta aattattact tgaagttttt tatttaataa attttttcta
                                                                         4200
                                                                         4207
ctaatgg
       ĎŇĂ
       Homo sapiens
       misc feature
n=a,t,g or c
<400>401 ctagaataaa ggggttgatt agtctgaaca gtactaatta actacaaaat aaacgttagt
                                                                           60
gantcagcct cttcctctat aaacaatgac caattagacg tttccgtaat tccatgtatt
                                                                          120
                                                                          180
atgtatagta cactctataa atgtaaatgt aatgcttgtc taaaaagtgc aatttattgt
acattqtccc aacaaatgtt tacttttata atcgttatga acttgaattg gattagtatc
                                                                          240
ttgtttttat gtgtgaatga agccttgtga aataacaaat gcaactgaga aggtacaagg
                                                                          300
                                                                          335
tgactgtttt tgtgagccag tgatgttttc aatgc
       DNÁ
Homo sapiens
       misc feature
n=a,t,g or c
<400> 402 tctcttaaag gattaaaaga ataggatagt ctcataattg tgagtaaaca tcaaggcatt
                                                                           60
atattttaca atactqaata aaatttcatc tacacacatg ttgccattgt ttcatttaag
                                                                          120
gttcagtgct tatagttaac tacaatattg gacctaacag gatctagatt agcaatataa
                                                                          180
agaagcatag tggtactctg tttcacactt tcagtagatt tattagangt caaattctat
                                                                          240
                                                                          277
tcaacaqaca cttnttagga tatacancta atttaag
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 403 tacaaatgca tattatccaa ctcagtagaa atccatgtac cccagaatgt acagaaggta
                                                                           60
tqcaatqttc caqaqtqtca ttgtcagctc tggctttaca tatatattaa atatatatat
                                                                          120
gttttgagac agggtctcgc tgtcacccag gctggagtnc agtggccaat ctcagctcac
                                                                          180
tgcaacctcc gcctcccagc ctcaagagat ccccccacct catnetcctg agtagttgga
                                                                          240
ctacatgcgc atgccaccac acccagctat tatttttatt tctttttgta gagacaaggg
                                                                          300
ctcactatgt tttctcaggc tgggtctcga actcctgggn ctcaagtgat t
                                                                          351
       404
486
DNA
Homo sapiens
```

misc feature

<223> n=a	t,g or c					
<400> 404	~t ~t ~ ~~t + ~	aatattataa	gaatgaagtt	gatatttagg	taacctatat	60
-	gtctaggttc agcagacagt					120
	cacattgcag					180
_						240
	cagtcttcct					300
-	aacaaggtgg					360
	tccccaggga					420
	cccagtttca					480
	tttgtttcat	teaettegae	agtttcagga	attadatatt	agggnagacc	486
ttttt						400
<210> 405 <211> 638 <212> DNA <213> Hom	3 o sapiens					
<400> 405	atatataatg	caqcatcaca	ccatqtaqqq	catttactct	tattttatac	60
	gtttgaaaca					120
<del>-</del>	acacttacaa					180
	aaagatatgt					240
	gctcttaaag					300
	ttctagctct					360
	gccgcttccc					420
	ttcggggaga					480
	attagtagca					540
	tttaaacaa					600
	agtgtagcca					660
	tctaaaaatg					720
	tgaatgtttt					780
	agcaagtttg					840
agaacaacac	gctgcgagaa	tacagtctac	agtctgcatt	aaataagaat	atatcagcat	900
tgtggtctgg	gaaaacctat	gcttgccagg	acaaggcagg	gtgctgagct	taggtcatgc	960
catgaaaatg	aatttgtggg	ttatcagtaa	acagtatgag	gactacacag	atgccagcat	1020
cctgctgcca	aggagacatg	gggcaagagt	tgaagatttg	agaggaaatg	aagagacata	1080
cacaacacca	aaggaaaagg	gggctggaat	caagttcagc	caaagcacct	aacacaaaaa	1140
acaggtgagc	tttggtcagt	ctgttcttca	aaatatgtat	gatcatatgg	taatgaagtt	1200
tcataatttc	caactcaaaa	atacaaatga	tcctcagttc	tatacttttg	cctctattct	1260
	. aatatgtcaa					1320
	tagtttgacc					1380
	. aggaaaaaaa					1440
_	tcttttattc					1500
-	tcttccatca					1560
-	gagctatatc					1620
	tttccttcca					1680
	aggagactag					1740
-	atctgggtgt					1800
	aaaagcatga					1860
					attctagtta	1920
agaaggtgac	: aacaaattga	. ggccgcgaat	tcggcgaaaa	ctctttcctt	tggttgtgct	1980

aagaggtgat	gcccaaggtg	caccaccttt	caagaactgg	atcatgaaca	actttatcct	2040
	cagctcatca					2100
	ttctttgtgt					2160
gaagaagcgc	acgctgaagg	ggtccattga	gctctcccga	atcaaatgtg	ttgagattgt	2220
gaaaagtgac	atcagcatcc	catgccacta	taaatacccg	tttcaggtgg	tgcatgacaa	2280
	tatgtgtttg					2340
	acgaggaata					2400
ggatgggaag	tggaggtgct	gttctcagct	ggagaagctt	gcaacaggct	gtgcccaata	2460
	aagaatgctt					2520
	gaacctgaag					2580
	ctcgcactgc					2640
tcactggtgg	agagtccagg	acaggaatgg	gcatgaagga	tatgtaccaa	gcagttatct	2700
	tctccaaata					2760
	gaaaaacttc					2820
ttccaggact	gcaggaacat	acaccgtgtc	tgttttcacc	aaggctgttg	taagtgagaa	2880
caatccctgt	ataaagcatt	atcacatcaa	ggaaacaaat	gacaatccta	agcgatacta	2940
tgtggctgaa	aagtatgtgt	tcgattccat	ccctcttctc	atcaactatc	accaacataa	3000
tggaggaggc	ctggtgactc	gactccggta	tccagtttgt	tttgggaggc	agaaagcccc	3060
agttacagca	gggctgagat	acgggaaatg	ggtgatcgac	ccctcagagc	tcacttttgt	3120
gcaagagatt	ggcagtgggc	aatttgggtt	ggtgcatctg	ggctactggc	tcaacaagga	3180
caaggtggct	atcaaaacca	ttcgggaagg	ggctatgtca	gaagaggact	tcatagagga	3240
ggctgaagta	atgatgaaac	tctctcatcc	caaactggtg	cagctgtatg	gggtgtgcct	3300
ggagcaggcc	cccatctgcc	tggtgtttga	gttcatggag	cacggctgcc	tgtcagatta	3360
tctacgcacc	cagcggggac	tttttgctgc	agagaccctg	ctgggcatgt	gtctggatgt	3420
gtgtgagggc	atggcctacc	tggaagaggc	atgtgtcatc	cacagagact	tggctgccag	3480
aaattgtttg	gtgggagaaa	accaagtcat	caaggtgtct	gactttggga	tgacaaggtt	3540
cgttctggat	gatcagtaca	ccagttccac	aggcaccaaa	ttcccggtga	agtgggcatc	3600
cccagaggtt	ttctctttca	gtcgctatag	cagcaagtcc	gatgtgtggt	catttggtgt	3660
gctgatgtgg	gaagttttca	gtgaaggcaa	aatcccgtat	gaaaaccgaa	gcaactcaga	3720
ggtggtggaa	gacatcagta	ccggatttcg	gttgtacaag	ccccggctgg	cctccacaca	3780
cgtctaccag	attatgaatc	actgctggaa	agagagacca	gaagatcggc	cagccttctc	3840
cagactgctg	cgtcaactgg	ctgaaattgc	agaatcagga	ctttagtaga	gactgagtac	3900
caggccacgg	gctcagatcc	tgaatggagg	aaggatatgt	cctcattcca	tagagcatta	3960
gaagctgcca	ccagcccagg	accctccaga	ggcagcctgg	cctgtactca	gtccctgagt	4020
caccatggaa	gcagcatcct	gaccacagct	ggcagtcaag	ccacagctgg	agggtcagcc	4080
accaagctgg	gagctgagcc	agaacaggag	tgatgtctct	gcccttcctc	tagcctcttg	4140
tcacatgtgg	tgcacaaacc	tcaacctgac	agctttcaga	cagcattctt	gcacttctta	4200
gcaacagaga	gagacatgac	gtaagaccca	gattgctatt	tttattgtta	tttttcaaca	4260
gtgaatctaa	agtttatggt	tccagggact	ttttatttga	cccaacaaca	cagtatccca	4320
ggatatggag	gcaaggggaa	caagagcatg	agtgttttc	caagaaactg	gtgagttaag	4380
taagattaga	gtgagtgtgc	tctgttgctg	tgatgctgtc	agccacagct	tcctgccgta	4440
	gagcagctgc					4500
-	gtatgctgct					4560
	aacagttcag					4620
	acctctgacg					4680
	aagctcatgt					4740
	ctcttctgca					4800
tctgtaaaac	atccttttt	ccagcctctg	ggaatcagcc	ccccctctc	tgcactatcc	4860

```
gatcctcatc aacagaggc agcattgtgt tggtcagtgt tcccttggcg agcaattgaa
                                                                    4920
acttgtttag gccctagggt tgagcaattt taaggttgag actccaagtc tcctaaaatt
                                                                    4980
ctaqqaqaqa aataaaqaqt ctqtttttqc tcaaaccatc aqqatqqaaa caqtcaqqca
                                                                    5040
ctgactgggg tgcttccaag aggcatgaga gtgcctactc tggcttgagc acttctatat
                                                                    5100
gcaaggtgaa tatgtactga gctaggagac ttccctgcaa aatctctgtt caccctgggt
                                                                    5160
tcacatcccc atgaggtaat attattattc ccattttaca aataatgtaa ctgaggcttt
                                                                    5220
aaaaagccaa gacatctgcc caaagtgatg gaactagaaa gtctagagct ggtattctag
                                                                    5280
cccaaatctg tctgaccgca atacacagat tatttattcc tattagacac tggcttctac
                                                                    5340
tgaaaatgaa acttattgca gagggaataa atacaaagat ggaaagccag taaagaagtc
                                                                    5400
agtatagaac cactagegat agtgttgete tggcacagac cactgtggtt gatgeatgge
                                                                    5460
cctccaactt qgaataggat tttccttttc ctattctqta tccttacctt qqtcatqtta
                                                                    5520
atgactttgg agttattcag ttcctgaccc tttaattctc acaaccaacc agtcatgttg
                                                                    5580
cttgaagcca ttatagacga gcttcaaagc aactttaaaa gattgttatg tagaagtatg
                                                                    5640
agttetteet ttaattatea tteeaacttt cagetgtagt ettettgaac aettatgagg
                                                                    5700
agggaggaca ttccctgata taagagagga tggtgttgca attggctctt tctaaatcat
                                                                    5760
gtgacgtttt gactggcttg agattcagat gcataatttt taattattgt gaagtggaga
                                                                    5820
gcctcaagat aaaactctgt cattacgaag atgattttac tcagcttatc caaaattatc
                                                                    5880
tctgtttact ttttagaatt ttgtacatta tcttttggga tccttaatta gagatgattt
                                                                    5940
ctggaacatt cagtctagaa agaaaacatt ggaattgact gatctctgtg gtttggttta
                                                                    6000
gaaaattccc ctgtgcatgg tattaccttt ttcaagctca gattcatcta atcctcaact
                                                                    6060
gtacatgtgt acattettea ceteetggtg ceetateeeg caaaatggge tteetgeetg
                                                                    6120
ggtttttctc ttctcacatt ttttaaatgg tcccctgtgt ttgtagagaa ctcccttata
                                                                    6180
cagagttttg gttctagttt tatttcgtag attttgcatt ttgtaccttt tgagactatg
                                                                    6240
tatttatatt tggatcagat gcatatttat taatgtacag tcactgctag tgttcaaaat
                                                                    6300
aaaaatgtta caaatacctg ttatcctttg tagagcacac agagttaaaa gttgaatata
                                                                    6360
qcaatattaa aqctqcattt taa
                                                                    6383
      Homo sapiens
<400> 406 cacgaggtca taatctagta tgcatagatt gtaaactttt agaaattaga aacttgaaaa
                                                                      60
cctacacttt tgctttggtg attttacagg tttgtacaaa cataattgag aaaaatgcaa
                                                                     120
acccagagtg gaatcaggtc gtcaatcttc agatcaagtt tccttcagtg tgtgaaaaaa
                                                                     180
taaaactaac aatatatgac tggtgagttg aaaatacgta tgtgtctaat tcaacataaa
                                                                     240
284
      407
244
DNA
Homo sapiens
cacaatgtyj ttaacatgga ttaatgtggg aatttggctt caagaacaca accttaggac
                                                                      60
cttgggccca aaagctggtg gtgaaatgag aggagccaat ttaagaagac ccttatggag
                                                                     120
acctgaggct gcagaaactg gtaggtttca tcaggtggtt aaagtcgtca aagttgtaag
                                                                     180
tgactaacca agattatttc attttaaaac cacagaataa aaatgacacc ttgagcttct
                                                                     240
ctta
                                                                     244
       Homo sapiens
```

misc feature

## <223> n=a,t,g or c <400> 408 actcctcttg ctcgtcatgt ctggccgcgn aaaggcggga agggtcttgg caaaggcggc 60 gctaacacgc gtnaaagtac tgcgcgacaa tatccagggc atcaccaagg ctnacatnnc 120 gcactttgct cgccgctgcg ctgganagcg attctccggc ctcatctacg aggagactcg 180 cggggtgctg aaggtgttcc tggagaacgt gatccgggac gccgtgacct atacagagca 240 cgccaagcgc aagacggtca ccgccatgga tgtggtctac gcgctcaagc caggggccgc 300 accetettae ggtttteggt ggttgagegt cettttetta ceaattaaaa ggeeettttt 360 382 cagggcaacc ccttaaaaaa aa 409 1086 DNA Homo sapiens <400> 409 cggggcggcg gcggcggcgt gaagtcactg ctgctctggg ttcgggttgg cgactgaagg 60 cggtaccggc ctcccggaac agcccggggg agggcttagg tgcagaaggg caggctggcc 120 180 gcggccggtt tggtctgggg accacgggct ggagcaggtg gaaatttaaa attgtttaca gtcaacactg tttccagcca tgggtttgtc tccatctgct cctgctgttg cagttcaggc 240 ctcaaatgct tcagcgtccc caccttcagg atgcccgatg catgaaggga aaatgaaagg 300 ctgtccagtg aatacagagc catctggccc aacctgtgag aagaaaacat actctgtgcc 360 420 tgcccaccag gaacgcgcct atgagtacgt ggagtgtccc attaggggca ctgcggctga gaataaggag aacctagatc cttcaaatct gatgccacca ccaaatcaaa caccagctcc 480 540 agatcagcca tttgcattgt ctactgtcag agaagagtca tccattccga gagcagattc agagaaaaag tgggtttacc cttctgagca gatgttctgg aatgcaatgt taaagaaagg 600 gtggaagtgg aaggatgagg atatcagtca gaaggatatg tataatatca ttagaattca 660 720 caatcagaat aacgagcagg cttggaagga gattttgaag tgggaagccc ttcatgctgc 780 agagtgtcct tgtggtccat cattgatccg gtttggaggg aaagcaaaag agtattcacc aagggcacga attcgttcct ggatggggta tgagttgcct tttgataggc acgattggat 840 900 cataaaccgt tgcgggacag aagttagata tgtgattgat tattatgatg gtggtgaagt caacaaggac taccagttca ccatcctgga cgtccgtcct gccttagatt cactttcggc 960 agtatgggac agaatgaaag tcgcttggtg gcgttggacc tcgtaaagca ctgtttcaga 1020 tggaaaaata taaactattt ttttctgagc gatacattaa actattttcc ccagaaaaaa 1080 aaaaaa 1086 410 2149 DNA Homo sapiens misc feature n=a,t,g or c $^{<\!400>}$ $^{410}$ gacatggcca acatcgcggt gcagcgaatc aagcgggagt tcaaggaggt gctgaagagc 60 gaggagacga gcaaaaatca aattaaagta gatcttgtag atgagaattt tacagaatta 120 agaggagaaa tagcaggacc tccagacaca ccatatgaag gaggaagata ccaactagag 180 ataaaaatac cagaaacata cccatttaat ccccctaagg tccggtttat cactaaaata 240 300 tggcatccta atattagttc cgtcacaggg gctatttgtt tggatatcct gaaagatcaa 360 tgggcagctg caatgactct ccgcacggta ttattgtcat tgcaagcact attggcagct

420

480

540

600

gcagagccag atgatccaca ggatgctgta gtagcaaatc agtacaaaca aaatcccgaa

atgttcaaac agacagctcg actttgggca catgtgtatg ctggagcacc agtttctagt

ccagaataca ccaaaaaaat agaaaaccta tgtgctatgg gctttgatag gaatgcagta

atagtggcct tgtcttcaaa atcatgggat gtagagactg caacagaatt gcttctgagt

```
aactgaggca tagagagetg ctgatatagt caagettgee tettettgag gageaceaac
                                                                       660
atctgttatt tttaggattc tgcatagatt tcttttaatc tggcattctc gcctaatgat
                                                                       720
                                                                       780
gttatctagg caccattgga gactgaaaaa aaaaaatccc tgctctgtaa ataaagctaa
ttaaacgtct gtgtaaattt aaaaagggga aatactttaa ttttttttct taatagtgta
                                                                       840
                                                                       900
aaaattccct gagctaagct aaaaccatgg aagaaacatg ctactttagt gtttagcagt
gtaccaagac tagcaagagt ttgcttcagg atttggttga ataattaaga taatatttgg
                                                                       960
agtgtgtcag ggccattcaa attgttggtg ttgcatcaca gctaccttaa ctgtttttaa
                                                                      1020
catggatect etgtgeetgt gaatttaett geatgettgt aettgaette ttaggatggg
                                                                      1080
tagctgaaaa gaccaccatt ttaagcattt gagaattctt aaatatgaaa tttattcaga
                                                                      1140
attgaagatg gtgacctatt cagagccttt ttgtccttgt caacagactg ggacagtgtc
                                                                      1200
                                                                      1260
tgattccccc ttcacccccc cccacccccg ccttggcaca cacagctaat attctaatgg
taaatttctc tgtatcaggt ggggaaatgt gctgaaggac agtatgtatc ccttgcttca
                                                                      1320
tttttaggtc gtaggtttgg aatgtcttgt cccagttctt caaacactct taaatttttc
                                                                       1380
ttaagtaatg taaaaatgga actgccaatt ttatttctct tgcaaaaata gtaaatactt
                                                                       1440
gatgttacat tattcccagg tttaatgaaa gaacccaact tagtttttca gtgaatttga
                                                                      1500
cacctatttt ttagtgatga aatttttctt tgagaactgg caaggatgca gtcagctgtt
                                                                      1560
tgcagttttt agcctgattt tggggtctat agagattgct ttattggata cttcaagtca
                                                                       1620
ttcttgcttg cacttcccct attgacacat gaaagctgtg ttggtgtttt attgtacata
                                                                       1680
                                                                       1740
cttcagatgc acataggaat agaagtgtgt tataaatcta gctttcttta tgatgtttct
gataatacga gaattgaaaa ctttaccttc tcttgtacat agtcagacta tttgtattaa
                                                                       1800
                                                                       1860
atttacattt cattctaagt tccaaaagtt tgaaaattat tagttttgca agatcacaca
ctaatgtaac cattttatga aggttgaagt ggatttatgc aggcagttct atatatagaa
                                                                       1920
atncaattct ttttaaattt ttaggaccaa tacaaaataa cacaaatgta atggaatcag
                                                                       1980
                                                                       2040
actgaattaa agtaaggctg tatattgaaa gtcatattat aaaaggtttg ctttctttaa
                                                                       2100
gtgttattta tcttaaatta taatcgttaa atgtttggaa gataattttt gaatcataac
gtcagcataa cttcatttga cttctcaata atcttgtcga cgcggccgc
                                                                       2149
       411
495
DNA
       Homo sapiens
^{<\!400>} 411 agactggace tactgattca acttggagat gagcgggtct gteetettca eggegggaga
                                                                         60
gaggtggaga tgctttctga ccccgtcgag gtcatccctg tactgggcct tacataattt
                                                                        120
ctgctgtcgg aaaaaatcca ctacacctaa gaaaattact cccaatgtta ctttttgtga
                                                                        180
tgaaaatgca aaggagcccg aaaatgcact tgacaagctc ttctcttcag aacagcaggc
                                                                        240
ttccatcttg catgtgttga atacagcatc tactaaagaa cttgaagctt tccgattgct
                                                                        300
                                                                        360
tcgtggaaga aggtccatca atatccgtag agcacagaga aaactttggg ccatttcaga
atttaagaga gtttaatgaa tgtgcccttg tttaagtata aaagtacagt tcaagtttgt
                                                                        420
aactccatac tttgtccaaa gactggacgg ggaaaaaaga aagtcaccgg aaaaccggtt
                                                                        480
cctgagaaag ctcct
                                                                        495
       412
575
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} ^{412} ccccagctc tcagggataa gaccagtccc ccagcgtggt ggtcagcacg gaagctccac
                                                                         60
cttctgggtg aggcgccatc ctaaccatcc agccaggcca cccacaaccc gagaatcagg
                                                                        120
```

180

gagaaagtcc ctccccagca gcccctcct cctggctggg aagaatggtc ccccagcaag

```
cacttgcctg ttcattcccg ttcatgtttt gcttctctct cagactgcct tcctgcttct
                                                                       240
                                                                       300
gggctaacct gttccaagcc aggctcctca atgtgacctc gcagttgaga agcccattat
                                                                       360
cgtggggcat ccttttgcct acagcccctg gttagggcac tttggacagg tcttgctatt
cagtgaacct ttgtacattt caaagaagac tccatggctg ctccagatgc ccccttgctg
                                                                       420
ggtgcaggtg gggactgtcc aatgcagagt ggcgggacag agagttaaag caattcctgg
                                                                       480
                                                                       540
gtctccttct tatgactgtc tatggggtga attgccttct ggggttgtct cgatctgtgn
ttcaataaat gccgctgnaa tgcaaaaaaa aaaaa
                                                                       575
       413
345
DNA
Homo sapiens
       misc feature n=a,t,g or c
<400>413 cctcagtccg atggtgaatg gctattcgta aatggctggt ctggctcttt ggtgttggag
                                                                        60
cctttccaat agccccatga aaagaagcat cacccaagga tattgtaaaa aggatgtaac
                                                                       120
aaggagatag ggtagacatt gtactcagtg ggccttgggg ctgagccnag ctctgagcag
                                                                       180
                                                                       240
aggactgtgg cattcactgt cettgagtgt ttcacettet tggataacae aegggeette
tcttctggat ttcatcagag attacagcca gatgggggct gaagaccatc ctcttgacca
                                                                       300
                                                                       345
cagaggtgtg actgtnggaa ttcctcccaa tttatgggtt tccca
       414
2584
DNA
Homo sapiens
<400> 414 gaggagcagc gagtcaagat gagagttcag ccgcggcggc agcagcagca gactcaagaa
                                                                        60
tgaacaatcc gtcagaaacc agtaaaccat ctatggagag tggagatggc aacacaggca
                                                                       120
                                                                       180
cacaaaccaa tggtctggac tttcagaagc agcctgtgcc tgtaggagga gcaatctcaa
cageceagge geaggettte ettggaeate teeateaggt eeaacteget ggaacaagtt
                                                                       240
                                                                       300
tacaggetge tgeteagtet ttaaatgtae agtetaaate taatgaagaa tegggggatt
cgcagcagcc aagccagcct tcccagcagc cttcagtgca ggcagccatt ccccagaccc
                                                                       360
agettatget agetggagga cagataactg ggettaettt gaegeetgee cageaacagt
                                                                       420
tactactcca gcaggcacag gcacaggcac agctgctggc tgctgcagtg cagcagcact
                                                                       480
ccgccagcca gcagcacagt gctgctggag ccaccatctc cgcctctgct gccacgccca
                                                                       540
                                                                       600
tgacgcagat ccccctgtct cagcccatac agatcgcaca ggatcttcaa caactgcaac
agetteaaca geagaatete aacetgeaac agtttgtgtt ggtgeateea aceaceaatt
                                                                       660
tgcagccagc gcagtttatc atctcacaga cgccccaggg ccagcagggt ctcctgcaag
                                                                       720
                                                                       780
cgcaaaatct tcaaacgcaa ctacctcagc aaagccaagc caacctccta cagtcgcagc
caagcatcac ceteacetee cagecageaa eeccaacaeg cacaatagea geaaceecaa
                                                                       840
                                                                       900
ttcagacact tccacagagc cagtcaacac caaagcgaat tgatactccc agcttggagg
agcccagtga ccttgaggag cttgagcagt ttgccaagac cttcaaacaa agacgaatca
                                                                       960
                                                                      1020
aacttggatt cactcagggt gatgttgggc tcgctatggg gaaactatat ggaaatgact
tcagccaaac taccatctct cgatttgaag ccttgaacct cagctttaag aacatgtgca
                                                                      1080
agttgaagcc acttttagag aagtggctaa atgatgcaga gaacctctca tctgattcgt
                                                                      1140
                                                                      1200
ccctctccag cccaagtgcc ctgaattctc caggaattga gggcttgagc cgtaggagga
                                                                      1260
agaaacgcac cagcatagag accaacatcc gtgtggcctt agagaagagt ttcttggaga
                                                                      1320
atcaaaagcc tacctcggaa gagatcacta tgattgctga tcagctcaat atggaaaaag
                                                                      1380
aggtgattcg tgtttggttc tgtaaccgcc gccagaaaga aaaaagaatc aacccaccaa
gcagtggtgg gaccagcagc tcacctatta aagcaatttt ccccagccca acttcactgg
                                                                      1440
tggcgaccac accaagcett gtgactagca gtgcagcaac taccetcaca gtcagcectg
                                                                      1500
```

```
tectecetet gaccagtget getgtgaega atettteagt tacaggeaet teagaeaeca
                                                                   1560
                                                                   1620
cctccaacaa cacagcaacc gtgatttcca cagcgcctcc agcttcctca gcagtcacgt
ccccctctct gagtccctcc ccttctgcct cagcctccac ctccgaggca tccagtgcca
                                                                   1680
gtgagaccag cacaacacag accacctcca ctcctttgtc ctcccctctt gggaccagcc
                                                                   1740
                                                                   1800
aggtgatggt gacagcatca ggtttgcaaa cagcagcagc tgctgccctt caaggagctg
cacagttgcc agcaaatgcc agtcttgctg ccatggcagc tgctgcagga ctaaacccaa
                                                                   1860
gcctgatggc accctcacag tttgcggctg gaggtgcctt actcagtctg aatccaggga
                                                                   1920
ccctgagcgg tgctctcagc ccagctctaa tgagcaacag tacactggca actattcaag
                                                                   1980
                                                                   2040
ctcttgcttc tggtggctct cttccaataa catcacttga tgcaactggg aacctggtat
ttgccaatgc gggaggagcc cccaacatcg tgactgcccc tctgttcctg aaccctcaga
                                                                   2100
acctetetet geteaceage aaccetgtta gettggtete tgeegeegea geatetgeag
                                                                   2160
                                                                   2220
ggaactctgc acctgtagcc agccttcacg ccacctccac ctctgctgag tccatccaga
                                                                   2280
actetetett cacagtggee tetgecageg gggetgegte caccaccacc acegeeteca
aggcacagtg agctgggcag agctgggctg ccagaagcct ttttcactct gcagtgtgat
                                                                   2340
tggactgcca gccaggttaa taaactgaaa aatgtgattg gcttcctctc gccgtgttgt
                                                                   2400
                                                                   2460
taccagaaaa ggaaggaagg atggagacgg aacatttgcc taatttgtaa taaaacactg
                                                                   2520
2580
                                                                   2584
aaaa
      415
275
DNA
Homo sapiens
<400> 415 cctcttgttc tctgcagagg atcagctggg cctgtccctg ctcagcctgg agcagctaga
                                                                     60
atcagaggag acgctgaaga ggatagagca gattgctcag cagctctgag tggggcgggt
                                                                    120
                                                                    180
ggggccataa acggttcctg gtgactcctg agtcttgcct ggccctggtt cccagcggcg
gtggtgctag aaggtcttat gaagtcaggt gacatttctc actgtcacgt ccacagcctt
                                                                    240
taatcgcagg agaaggcagc tatccaccag gtacc
                                                                    275
       416
318
DNA
Homo sapiens
<400> 416 tttattattt tgaatgattt aatggttttc tacacaattt acatcacaac atgtaaattt
                                                                     60
tagcagtaac atctgattct aacagcacat catgctattc ctttcataga gccttcagag
                                                                    120
attcaatgct aaacaaattt ccttagttgg catcaaggca ctgatcactt tagaggcttt
                                                                    180
                                                                    240
taagaaatta tttaaagatg caaatgcctc tgagtgaagt gtactatccc atcactgaag
cccacaggaa caagtcctac aattttaaaa aggctcgatg gaaaaatttc tcaatcctga
                                                                    300
aatcccctag ggaagggg
                                                                    318
       417
1297
DNA
Homo sapiens
<400> 417 cctaagtcgc cgcagaactg ccacgtgggg atgagatttg ctgggctggt agcggcggct
                                                                     60
gctgcgggga ggtcccgccc acgtgaagcc agcctaactg agctctggac tttggggaca
                                                                    120
gctgtcagtg gcctaggccg caggacacca tgaagcaact gccagtcttg gaacctggag
                                                                    180
acaagcccag gaaagcaaca tggtacacct tgactgtccc tggagacagc ccctgtgctc
                                                                    240
                                                                    300
gagttggcca cagctgttca tatttacccc cagttggtaa tgccaagaga gggaaggtct
tcattgttgg gggagcaaat ccaaacagaa gcttctcaga cgtgcacacc atggatctgg
                                                                    360
gaaaacacca gtgggactta gatacctgca agggcctctt gccccggtat gaacatgcta
                                                                    420
```

```
gcttcattcc ctcctgcaca cctgaccgta tttggggtatt tggaggtgcc aaccaatcag
                                                                         480
                                                                         540
qaaatcqaaa ttgtctacaa gtcctgaatc ctgaaaccag gacgtggacc acgccagaag
tgaccagece eccaceatee ecaaqaacat tecacacate ateggeagee attggaaace
                                                                         600
agctatatgt ctttgggggt ggagagagag gtgcccagcc cgtgcaggac acgaagctgc
                                                                         660
atgtgtttga cgcaaacact ctgacctggt cacagccaga gacacttgga aatcctccat
                                                                         720
                                                                         780
ctccccggca tggtcatgtg atggtggcag cagggacaaa gctcttcatc cacggaggct
tggcggggga cagattctat gatgacctcc actgcattga tataagtgac atgaaatggc
                                                                         840
                                                                         900
agaagetaaa teecactggg getgeteeag caggetgtge tgeecaetea getgtggeea
                                                                         960
tgggaaaaca tgtgtacatc tttggtggaa tgactcctgc aggagcactg gacacaatgt
                                                                        1020
accagtatca cacagaagag cagcattgga ccttgcttaa atttgatact cttctacccc
ctggacgatt ggaccattcc atgtgtatca ttccatggcc agtgacgtgt gcttctgaga
                                                                        1080
aagaagattc caactctctc actctgaacc atgaagctga gaaagaggat tcagttgaca
                                                                        1140
aagtaatgag ccacagtggt gactcacatg aggaaagcca gactgctaca ctgctctgtt
                                                                        1200
tggtgtttgg tgggatgaat acagaagggg aaatctatga cgattgtatt gtgactgtag
                                                                        1260
tggactaata aaacccacat ttttattaaa aaaaaaa
                                                                        1297
       418
469
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 418 actqtqataa aacatacaca gtttacaaga atatgaaatg ctttactaat tcgtgtgtca
                                                                          60
tccatgctaa tcatctctct attgttccaa ttttagtaca ggtgcttttg aagtgggcac
                                                                         120
tcttaatttt ttgaacattt tctaggtttc tgataccata ctcattctgt gtcttaccta
                                                                         180
tcacaacccc agaatcagcc atttctccaa attcctttta gtggagagtg gtatttagaa
                                                                         240
accaggatet ggacaccatt tetetttttg ttattgttgt ttgeettget ttaatgatag
                                                                         300
ctctttttat taatttttcc attattataa aagatggcca aatacataca tttctatgga
                                                                         360
                                                                         420
aaatgaatca agtcttatnt attttacagt taaaatttca ttattcctat tttaactgat
                                                                         469
aaaccagttt aattttcaag atgtattaaa gtctcccaca attgtattc
       419
422
DNA
Homo sapiens
<400> 419 tgatgettge agagaaccce aataacttga tetteaagae gggaattaet tetgattaea
                                                                          60
ctctgagaat atctgtcatc tgcctttgac accttataag ttgattcttg agcattaatt
                                                                         120
tctccatcag atagcctttg ggttgatgac tcaagagatg cttgtggctg caacacctgt
                                                                         180
aactettgea ttggaaaace atettettge tttgaagatg gatacacate tgagteaage
                                                                         240
                                                                         300
tttctttcag cataagactt tgggtcaggg gaaagttatg ttattttgta atgtctgaca
atgagtagag ggatgcaaaa agattgatga ctggacagca ggcaaaaact tctgggactg
                                                                         360
ggggagatga tgactcttga gtctgaacat tttgggaaga atgcatagaa atataattct
                                                                         420
                                                                         422
gg
       420
388
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 420
aagattatac gaangattta ttgatactgg ttaacatcca ttatatacag gtagaaactt
                                                                          60
```

```
120
tcaaaattqt acaaagaacc attaagcata ttgataaaga cagttttaca gacaaaacaa
ctggaaaata gttttaacat acacaatata taattatgaa aaaaatgtag aacacatatt
                                                                         180
qttctaccaq ataaatccca aqqttattaa aagtctgcta tgcagacctt taagttgaaa
                                                                         240
aatgtgttca atggagttac atggttttag aaaattaagt ataatgttaa aattaagctt
                                                                         300
ttttttctca ttgcaatttg ggagaggaac tgagacaact tttttacccc aaatctatac
                                                                         360
                                                                         388
agtttgaaaa ataatttata tgtctagc
       421
421
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 421 tttttntntt cattgctcag gtaagaattt attaagtcaa tttaaactan acattactac
                                                                          60
cattgcaaaa gcatttgctc tgaaaaggga ctgaaaaatg catcataaag ttacatagtt
                                                                         120
                                                                         180
caqcaacaat atcaatattq attatataaa qtaaaactac tggcaaacgt catttaagct
taccctgtaa tttttaataa ctttataagg agcaaatgtg tcaccttaaa aatgtaccag
                                                                         240
tqqcatttac aaattccttc aaactcattt acaaatacag taataaaaat tcctgagctc
                                                                         300
ccttttctta caccagtatt caccaatcaa catccatgcg gtgttttatt tgacccacat
                                                                         360
cctctttcct tttcttaaqa aaatatttta tcacattcgt aaaagtatct gtgcttcang
                                                                         420
                                                                         421
t
       Homo sapiens
       misc feature
n=a,t,g or c
qctttcaqqa aaqqtttatt gtggtgaqtg ccttctgtac agtcaactgc aaatgaaacg
                                                                          60
cagaggatgg gtgcccagaa gcactgcggc agaggcgcac gggaagcccg gggccaggct
                                                                         120
catgcaacac gacgctcacc gcggctcggg cctggggcgt cagagaaacc tttttaaaaa
                                                                         180
                                                                         240
atggagatga atgttacaga attggacaac ccgaactgct tttcaaaacc agaggaagga
                                                                         300
qqttcttaaq ccgttactca gataccagtg ctggggaggg aggcctgact tcagcaacag
ctgtgggtgg gctggaggcg gcgcantttg gggnccccca cgccagctgt ctcagccacc
                                                                         360
                                                                         420
accttqtqcq qcgctttgct ccgagggggt cagcaagagc aactgattgg ctgccacttt
ccaggccccg agagacaggg cctcacgtaa cttta
                                                                         455
       423
415
DNA
Homo sapiens
<400> 423
ttcttgcttt ctttaaatct ttatttaaaa gtccatgcta ataatgtgtt tacattttta
                                                                          60
caqttacatt atgatagaaa ctgttggatt ttttaaatat ctaaaacaat ggcccactga
                                                                         120
agaaaggaac aattaactct ttaattaatt ccttaggata aatacccaga aatttaacag
                                                                         180
                                                                         240
ctagggcaga cttctaatac aataccgaaa gtccttccaa aaaccaagtg gttgccaact
                                                                         300
tatgtccctt agcattataa cattcttgag ccaatagtgt aaaaatacgc tgacaatttt
ataggcaaac attactcaag gtatcttact ttccacttat tactaaaggt aattaacccc
                                                                         360
taaataqatq ctcctcaaca qtqqqactac atcctggtaa acctatcata agttg
                                                                         415
       424
421
DNA
Homo sapiens
```

```
misc feature
n=a,t,g or c
<400> 424 aatgtttcac tctttatata taattgaata cttagttatt gtgacaaaaa gttagtatgg
                                                                           60
ctaaagaaaa taatgcaagt acatcacctg aaataacncc tgtatcccac gatacatgaa
                                                                          120
tccaattcca atgctgtttt ctttctattt cagcaacact atacgtagtt taatagtcaa
                                                                          180
qataccactt gaatactatc caagaataat cagatctgct caagttaggt ttatataatt
                                                                          240
taccaaqqtq ataqattctg actttgaaga ttactgacca ctgatcacta agaactaata
                                                                          300
ttagctgacc atatgatncc ncaagaacta actttgactg ataaatttga atttcatctt
                                                                          360
                                                                          420
ttqtacactq aqqaaaqaga ttaacaattt tctccacatc aagatggctt gtnttgaagg
                                                                          421
а
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 425
tgacgtgtta cctgctattt ttattcccca tttgccatct tctgattggg ggttgatgtt
                                                                           60
ttacagattt tttttcaaa ggctttattt cagtttctga ggttaggatg cccctgtgcc
                                                                          120
cctcgctcca cacctgggca ggtctaaact tccttccagg atggcctcca cacacagcct
                                                                          180
cccacctggg gtcacctggc ttcctggggg acccgcaang anggggcagg gagcagcagt
                                                                          240
ccgggtgcgg ggatcggggg acctcggcgg gggcatccac aggggctgca agacctctgg
                                                                          300
                                                                          360
tcagcatggc gtgggtgggg agagcgtttc tccctggggt cctgagccag tgactcctgt
taggacettt gteccaecte egeetggtgg aceggeagga eetggtetag eeagteetge
                                                                          420
agcctccatt cccccacctg c
                                                                          441
       426
561
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 426
aatcagcagc aagcagaatg ttaattaata gtctaagatg atctgagagt taattaatag
                                                                           60
actaagatta tctgtggtct atttattgac cacaccttat aaacaggata ggtttttcct
                                                                          120
attttgagac tttacatgtc tcagtacttt ctaaattgaa atcagagcat taaatcaagg
                                                                          180
gaattgatgt ggacaaaaca gctgccagca tgatagtgtt tgtgaattat gtacctctct
                                                                          240
                                                                          300
taqacataaa ctcttagaca taaactcata aaatctgttc agaacactga acagatttag
atttaccata gccaataaaa tttggattta gtgggttagt ctcagcattt catggaatcc
                                                                          360
tgagatgccc aaatctctgg aaacttccta tttcctgttt tactatcttt ttccttttat
                                                                          420
caaaatgggt gccatgaggg tcccagacca aaactcacca tcctggaaaa acaaaagtct
                                                                          480
ggggagagaa ctccnggttt tatttcagat gatatatttg ccaatcnttg gaataggtcn
                                                                          540
                                                                          561
ggtcataatt ataataggat t
       Homo sapiens
       misc feature
n=a,t,g or c
^{400}> ^{427} ttttttttt ttttttgctg agaccggtaa tattctttgt ttatagtagt aatatcattt
                                                                            60
```

```
ggaatagcgt gtttaagagt aataaataca gtctcttgga cacgggactc acttatcagt
                                                                    120
tcatactaca ataaaatcat tttggaaaat atactactaa taatatattt caccaaaaaa
                                                                    180
caatattaca attttcttta aaattatacc aattatgact catacaatag caacacctag
                                                                    240
aaaacatttt gtctgacgtc ataaaatgag tgcagatata aaagaatcaa cagcagataa
                                                                    300
tqcacctaat tcatqqatta aaqacaaaqa ttaaaaaqqa aaqaaqaqtt tqtcatttta
                                                                    360
catatcagng gaaatataat aagttaagtc tacaataatc tgggttgaat gcatcacact
                                                                    420
tacacattga aaatttatca gactgac
                                                                    447
      428
429
DNA
Homo sapiens
<400> 428
tgaaaagatg aaagctgaaa aaagttaggt ttggtgtagg ttacaccaat ggatgttggt
                                                                     60
qcctcctact qqtcctaaca aaaatataag tggtaccagc aggcactact tcgcatacca
                                                                    120
atgtgaagta aaaattccct ttcatctgtg gtcaagtatg gaaaaattat gaaggtcctc
                                                                    180
attaaatcca cattttttaa cccattaaat tatccttata aaaattcaga taaactactg
                                                                    240
tcataaatgc aactgcactg cctcaaggac ctaaaaactg ttttcctaat caactagatg
                                                                    300
gcataatcag gtaacagcag aaacagatag tctagtgaat ttccgagagt caaaatatgc
                                                                    360
tactttgatg cttattaaac actgaaaact ttcacaatac taactccagt taagttgggt
                                                                    420
                                                                    429
gaggttaaa
      429
446
DNA
Homo sapiens
<400> 429
totgaaaato agoottttaa totagttgaa cocaacgagt ggggaaagaa otaaaacatt
                                                                     60
tttttccctt cagattttga ttataagaat aacgggtcag aggtgtctct tccataggaa
                                                                    120
180
240
ctctacaggc acacatattc acacaccaaa gggactcctt cctgtaactg gggaacagaa
                                                                    300
tgtaaaaaaa tccatccaag tggccaccga taccagaaat aaccaaatgc atttacactc
                                                                    360
acaacatcag tcaactcaca tgcacaagga gaagcgtctc caatcggagc ttagagccaa
                                                                    420
                                                                    446
aaattacaaa tggcagagac ttgagc
       430
       614
DNA
Homo sapiens
      misc feature
n=a,t,g or c
^{<\!400>} ^{430} agttgaatta gctaaacgaa tccttgtatt tatttttcac acagcacaaa tgcaggtagt
                                                                     60
acacagtaag ttcataattc cccacaaaac ttataaactt aacaaatggg aatctaaaca
                                                                    120
taatattctg aatcacccat agctatccac tgtgtggaat ccattctaca gcagcagagg
                                                                    180
agtaccttaa tttaaagcac caagtttcca ggcattacta caaatatctt cttttcattc
                                                                    240
tctaatacat gcagtcaaac tgcctatgaa gcaaatacca attcatctta cgctttaaca
                                                                    300
gataaggtaa agcacttggg aaatcaacat tattcttaag tctgaaagtg attctacctc
                                                                    360
tttacctatt atattttctc ccatgaaatt ttaaactttt aatggagtta tatttaatat
                                                                    420
gagaataaat taaaatttga acttaatgtc tttcagattc tccagcgttt agaatgttat
                                                                    480
atttgtttta tgtctgaggg aacaaaacgt aatttcnaat ttagatattc tggctacctt
                                                                    540
attaaaqqta cattataatt tataqcaaqq aatatcatcq gttqqccaac atacqqattt
                                                                    600
aaaaatnccc aatg
                                                                     614
```

<210> 431 <211> 154 <212> DNA <213> Homo sapiens	
<400> 431 tqtacatctt tattatttct aaagcacttt cctcaaccta atttcagttt ttacaattgg	60
tactcaagaa aatagagaca gaaatcattt gattttgccc agaaaccatc tgcttatatt	120
tataaggcca cctaatttga aatcacatat agac	154
<210> 432 <211> 315 <212> DNA <213> Homo sapiens	
<400> 432 ttcgaaacct aaaaatgtat tttattttga agttgtgctt tggattttcc ccaatccaac	60
atctgttgag tgacagtctt aggttcacac aaagcatctc caagcataca tacaatattc	120
cagttatcaa cactatttta aagaatatac cattttacac aaatgtgaca tacaagtcag	180
acgccacaac attgcgattc cctggaagat gtgacttctc ttctgcatgg gaagtagatc	240
tgcaccagcc cttccagtgc tctgcgcatc ccggtgctgg catcaccgct cctcatctcc	300
ttggggagaa gccag	315
<210> 433 <211> 433 <212> DNA <213> Homo sapiens	
<400> 433 atctatqact acaqqaaaac atttatttac atqccctcta caaaatqgat ttacaaaaca	60
tagtaactat tagggtacat gaccttgctc ctatcttccc cattgtgctt cttctctata	120
gaaaatccaa tatgaaatga caaagagtac tgtactcaga ataagaactt catctatcat	180
aaatgtacac ataaatatca gtgaattgtc atactcaaga ctcagattca ggaacttctt	240
catcagggca gcagtaatat tccacaaaac atatttgtcc atcttcattt ctaatcatat	300
actgtaatga aaggaagcct ctgttatctg tccgaataga taccttacaa gataggacta	360
atgcctttgt agagggtttc agtaagggaa tcttgtatct gttgacttgg gtctgattac	420
aatgaaatgc ttc	433
<210> 434 <211> 182 <212> DNA <213> Homo sapiens <400> 434	
tatgagtgga cggcagacag ctatatttag tggtgcctcg acactcacga accgccagcg	60
tggcgcctgg atcttgccca gctgccagct ccccccacca ggactgtggt tcctcagttt	120
ctcctgccag ccccggctca tctcagggca aagctataga catggtagat ctcatcgggg	180
ag	182
<210> 435 <211> 476 <212> DNA <213> Homo sapiens	
<400> 435 caaacctcct cctttcaaat caggaagtat acataaagtg caagtaaggt tcattccctc	60
gctgtgctcc taggctcttc tcttgatagt attaccgaat ctatcaggta aaccgctggc	120
cgagtaggat gtctgcagga atttctggag ttagcaaata acttcatctg gcaaagagag	180
tatctgaaga tcaacacagt cttggcaaga aaacatgaag taccacacac aagacaggga	240
tgtgaaggat gcaagaagta gcagggagat tgttgtcact gaagaggcca tctttggatc	300
tcaaagaatt taagagaatt caggaaccgt tactaaaatg aacaaggcca gcagatttca	360
gagcacggtc agtcttcagt gagggcagat tcagttttcc tagttaaatt cctgaatttc	420
tttttggctt ctgccctttc ttcagcatca aagtaccaga cagtcatagc atatct	476
<210> 436	

<211> 379 <212> DNA <213> Homo sapiens	
<400> 436 aaccaccacc accacagcca tttattaagt gcttgccagg cactgtgcta aagctttaca	60
aacattgttt cagttattcc aacaaccctg aggtagatat tttcaacatg cctccctcca	120
cccatqttat tataqttqaq qaaactqaqq ctcaqaqaqq ttaagtaaat caaccaaggt	180
caaacccaqc tqqtaaqtaq tqaaqctaga aattcaaacc aactatatgt gactccaaaa	240
tccatqcctt taaacactat cctaqattqt ttaccattga aagttaaagg acatatgctc	300
cttcccaaaa tatqaqaata qattttcaqt gggaaagcag gggggagcca tatgtaaatt	360
ctttcatcag ctatgggac	379
<210> 437 <211> 403 <212> DNA <213> Homo sapiens	
<400> 437 tttttagttt ggttttgatt ttaaacattt tattattgaa atttcaaaca catacaaaag	60
tagaaatatt agaacaataa gtctccatga acaaaacact ccacttaaat tatcaacatg	120
ttgccaattt agtttccagc tctctttgcc aattattttt cttttgctag aatattttaa	180
tccaaatgtg tctatcttca tttcatagta tgtatctcat atcatacgat cttttatttt	240
ttataatcac actgacataa tccctaacca aattaatata tgtaaatatc atttaatatt	300
tagtccatgt ccacacttcc ctcactgtct ccaaaatggc tttttatgtt ttgttcaaac	360
caggtccaag taatgccaac atactgaatt tagttgatat gtc	403
<210> 438 <211> 522 <212> DNA <213> Homo sapiens	
<400> 438 cagteetaga geetgeagta ttgtaatttt ttgtaaaaee atgtaaeeaa ataettaaat	60
atatccacaa catctatacc acagaaatgc atagtacata atatactaac atctcaaaat	120
aaacttctat tacagtttta tgcaaattat ggtaaaagat tatcacctgc cacattttga	180
aatggcacca acttcaacat caatgcacta gtcaaaatcc ttactagaag tgatgtcttc	240
tgcattatca tctgaacatt caaaatcaag ctgttaatct aataaccaca gtatgttatc	300
atttaaaatc actgtatatt tggatgttaa agcaggtagt aatacagcag gaaaagtgtt	360
tctaattcac agtttcaaaa ctaaagggtg cagttttcaa atatctgatt gcttaaattg	420
gtcactcaat ttaacaactg cctccttcaa tacatgtaaa ctatgtttgc acagcattag	480
gagatgtett ttattteaga attagttett aetgttaeag ga	522
<210> 439 <211> 353 <212> DNA <213> Homo sapiens	
<400> 439 gttatttaag gatttgttta atgttttaaa attcaaagca ctttaaatta ttttaagaca	60
aaagattaat aaaaacaaca ttacctttca aatacaactt tataacagca cagtggaaga	120
atggtaaaca gtccctcttt tttttaaaaa aaaatcagta cttaaaacca aaggaaggct	180
tatatgtaca gctaattcag aaagggaaca atgacaccta aagacataga taaatgcttc	240
attttaatcc aataaatgtc ctacctactg gatcttaata atgatgtttt caatatgcca	300
tttaaaataa actatccttg aaaataaagt tttaaatcat tcaatataat cta	353
<210> 440 <211> 416 <212> DNA <213> Homo sapiens	
<400> 440 gcatctaact gtccataaat tcatggctac agtagagatt cacggcgcaa cgactttcat	60
actggttatt tttttttaat tctgtcagtg agcagcattt cccagtttta cactccccta	120

```
atggcagete cattaggega gaetgcagge tgcatetgtg attaggteca tgcagetega
                                                                      180
agatcagttc ggcacgcggg agggtcccga aagctgggtc tgtccagtgt cttgcagcag
                                                                      240
cggttgcagg gggtctacca gctcgccctg acagcttcga tatcgctaac caaattctgg
                                                                      300
                                                                      360
gccaggcata tcccaaatat ctgcagcaat gcaatgccta tgaaaatacc agcaacgatg
qttaaattqt cctqcaacca cttctcaaac tggggcacac agctttcgtg tagatt
                                                                      416
      441
400
DNA
Homo sapiens
agtcaactgg taaagtttat ttcataagta taagtaattt taagcctttt actaaactgt
                                                                       60
aaatttcaat ccattaaaaa ctactaccgg agcagttttg aggtattact gttaatttag
                                                                      120
tatagaaatg ttactgtatt ttgatgtggt atgaaatgca gccgccatgc ctttcatgaa
                                                                      180
acggtgctat cgtggtgctg actacagaca tgtcctatgg ctttcaggaa attattgtgc
                                                                      240
                                                                      300
atqtqcatta acaqattttc caaacattaa tgacaatttg attggttagt catttgtaag
                                                                      360
cataccaaaa taataaagta tagcccacgt atgagccaaa cacactgaga catttgaggc
                                                                      400
atacaatqct accctccaqt ctactttcgt cagaaaccaa
       Homo sapiens
^{<\!400>} ^{442} tttttttt tttttcacat acagtctttg ttttaatgtt tattggtaga aacagatctt
                                                                       60
120
cactggagat ttttagcctc caagtgaact taacatattg cctatgcatc tgattcttta
                                                                      180
tagactttta gattttaaag ctaaatttga gaaaccatgc atactgtata ccttatttaa
                                                                      240
taatccaaag aattgtttgc actttcaaaa aagttacaaa aaggctgaac acaagttaaa
                                                                      300
taacctatat gatgtaaatt ttccatttct gaatactttt tcagtattat atattgcttg
                                                                      360
                                                                      420
ctgtctaata agttagattg tcagagacgc ttcagtaaat tatctctact ttaaaaattat
atctga
                                                                      426
       443
456
DNA
Homo sapiens
<400> 443
tttttttttttttta qtcataaaac cqattattta attgaagcta taaaaaaggt agtataagtg
                                                                       60
                                                                      120
ataaaataat taggaaagaa tatttagcat gtttcaaaac atttaaaata ggagcagaac
attttacaaa aagttgtaca ggaaattaaa ttcttaaact atcagtacaa acatgacatt
                                                                      180
acagaqtatc ttataaaata caaagacaaa tataaaagga ctatgatgct ttaagtctga
                                                                      240
aaactattqq ccaaatattt aqqtttaaat ttacaqttcc tgggtatgag aatcatatta
                                                                      300
ctatatacat ctcccaaacc agtaggtagt attttccaat taaccatgtg tggtatcatc
                                                                      360
ttctacaaag tctttggcca tctctgctgt gatcacatca atatgactaa ccttatttct
                                                                      420
gaactttaca ccatagaatt tgtcagctga ctcaag
                                                                      456
       444
311
DNA
       Homo sapiens
<400> 444 tcctttatac ttctgtttat ttttcctgct tatgaaaaca gccaacaatt gcctttcaag
                                                                        60
ggaagggaag gtaatgetgg gaaaggteet caggageeet gagecaagtt etcaagagag
                                                                      120
aagtgaggca gctggggatc tgggaggcca gagtccgggc cagggcctca gcatcctaga
                                                                      180
accagggctg cctcccgaag agcagttcag agggcgtgac tccatacggg cagggcgct
                                                                      240
                                                                      300
ccacacagge ctggaacacc cttctcctca geccagggag ctcatcaggg tctgggcctg
                                                                      311
cttcagttct g
```

<210> 445 <211> 332 <212> DNA <213> Homo sapiens	
<400> 445 tttttttaa tgtagattct ttattgattc caccaatgta ttagtagata tgataataat	60
aaatggtatt tttacattct cttaaccaaa aatataacaa atatttacac tcagtaaaaa	120
tacaaaaagc atacagaggc actgtctttc taaaagacat aagtttaaga ggtatcgaaa	180
aataggagac aaacattgct tgttacagga taccttacca tcaatgaatt gtgcagtaga	240
attgctatct gattattaca gatgtgcagt tttgtttctg tcctttgctg attagcttac	300
atgtctcaat tttaaaagat caagttcaac tg	332
acycocoad cocadage caageroad og	332
<210> 446 <211> 385 <212> DNA <213> Homo sapiens	
<400> 446 tgtgatgcag catcaggtgc ttttacttca gtgaatgaaa aataatggtc acaactcaaa	60
tgaatgggaa tttaatatga atatatgcac cttaccagag atgtttgcta ccaatgatat	120
cttagcaatt ccatattcct tacaaagtca gtataattgt tgtaaaaaaa tcaactgtgg	180
ttctgaatac ccattcacag ttgacctcaa caatgtatct gatgtaggag actgagtatc	240
cgtgacaggc agaagcatgt gatggtcctc agtcccaagt ggaagagcta atggtaaagt	300
catatcagaa ggcttcacat ccatagtttc tgataaagga cttttttgta tggaatcctg	360
ttcactcaaa gtatgatcct ctgca	385
<210> 447 <211> 500 <212> DNA <213> Homo sapiens	
<400> 447 ttttggaata ccattgtgtt tattgatcaa acctggcttc gagtgtgaca gagccattct	60
tggttctcct tggaagtaac aagaacactg ggtaacatgt gaagtgcatg gagactcacc	120
tgaatcccac caaagtagta gctggaccca gtagcctagc ttattgtctt ggcagtgccc	180
ctacccagta ccattagacc tggctttgtc ccttacatag gacagactgg gcttctccac	240
tcccgccagg ctggccctac ctccacctgt ccttggaagc tagtatgtaa gtaagggagg	300
agtcatcaag tttatagatg ggtaggctga ggattgaggc aggaggggac ttaatggctg	360
agtecetgge ttgttecaga geeetggeee ttgageeeet ggaetggtea gtgeatggae	420
acteteceet eccagetegg geggaagaet ttteetgaet tagetgetee atacacacaa	480
tctataaata tgtatttgct	500
<210> 448 <211> 379 <212> DNA <213> Homo sapiens	
<400> 448 ttttttttt ttttttttg gagctgatgc ctctctttat tcatgtattt catcccctgc	60
tgcctggttt ctcctgaatc cccttgttcc cctaaatagc acccccagtc cccgccccta	120
gcccagctgc aggtggagta gcagctgctg tctccattca gcagatgggc agactgaagc	180
ccaagagtgt ggagcccagt ctgaggtcac acagcagtct cctgggttcc cacttggcct	240
tcaatgggga gggaggactt ggcctgggct ccgtgcgccc tcactgcagg gtggctggct	300
gcggcacgtc gcagggagct gccaatctgg tctctgaggg cctccagtct ctgggccagg	360
tttggaaccc cggccccac	379
<210> 449 <211> 433 <212> DNA <213> Homo sapiens	
<400> 449 ttgtttttt tttagatcta ccttcagttt tgtcattttc cagtattcac aatcctttca	60

aagtttcctt taaaggggaa aaaacagagg cttgtaagaa atatgctcaa agaggttcta ggacttacag acatcccatt ccagtataag atacaaaagg caaaatgttt cctttaccca tgatccaggc tagctccaag aatcctaaaa acgatgttt aatttggaat ctgggatgcg gcgttttgtg gattaacatg tgttctgaca caaggactac tctacttcct taagaaacat gagcaaaaat gctttgctca acaacctagt tatgtatgta caaatggtga tcatggtcct tactgataaa aaacttataa gcaatttctg ttacaaaaatc gatcttgcta acaggtcttg gtgtataagt tag	120 180 240 300 360 420 433
<pre>&lt;210&gt; 450 &lt;211&gt; 207 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<pre>&lt;400&gt; 450 gtggaagaat acagaaatat gtttaatact tagtatcaaa ctaaaaagta atataaaatt acaaaacttc tttttttca tgcacaggct tttnctggta aggaccgctg ggattgaaca gaagcttccg gtaaataagg gccccgtcgg caagacagca tactgctgtc acaagtgcaa acacccctcc accaactgtc aatgttg</pre> <210> 451	
<pre>&lt;210&gt; 451 &lt;211&gt; 286 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;400&gt; 451</pre>	60
caacttgacc taagtgacat ttatagaaca ctccgcccag caacagcaca gtacatattc ttttcaattg cacatggaac attcaccaag ataggtctca atacatttaa aaggntcaaa	
attatgttaa acatgattaa caaaacagaa cattttgtag aagagctaga ggattaagta	
aaaaaaaant tootaganta ognagacact aaaagagtat ataagtgaaa aattgaggga	
qqatactqtg ccnggaagta cagtgtctac tagaagtttc agaaag	286
<pre> &lt;210&gt; 452 &lt;211&gt; 457 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 452</pre>	
ccagtcgggt tggagtttat ttctgccaga gcctggaggc tgggagggta aaggacactc	60
ctttagtccc agagggaagc tccgaaccct cagagcaacc agaagggagg gcagagcatg	
ggcagcagca ggagtgagag gggtcccctt gtcctgcccc tttgcaaggg ttcaaggctg	
gtggaggcct ggggcttctg tcgctcagga gttcaggggt ggacgcagaa atgggggaag	
gagagtggct acgtagagag tgagagcgag attcctaaaa agatgcacag agagaccctc	
agagagaagc agagggaatg ggttgcactg gctgaggatg gtggaggagc cgtctcactc	
ccttcctaat gtctatagat caataacgag ggaagaaagg aggacaggga gctgatggaa	
acacagettg ccaactgtac ccagteceec aacaage	457
<210> 453 <211> 526 <212> DNA <213> Homo sapiens	
<400> 453 ttttattett tettgagget teattttgtt caaggteact acettgtgat getttagaet	60
tttgggtagg atgaataatg tgtttttctt tgttgtagga aggatccgaa gataaagctt	
cagaagatgg tatactaaca tttttaggat ctgctgatga agcaatggtc tttaagttta	
tcatagaagt aacattttta ggggctgctg acagttctgt agataatgtc tgtcgaacaa	

```
cataacccat tggtgtccaa gataactctc ttgtacatga aggagaattg gtagcggcat
                                                                        300
tagcagttac agattcattt gggttatttt tcaccactat ttcacccttt gataacactg
                                                                        360
caqctqqttt tactacttct cttagaagag aaatgtcggt agagacagag tggacaggtc
                                                                        420
cccacttggg ttgcttctgt atctctgaca tattgttctc tgcaccttgc agttcaggaa
                                                                        480
                                                                        526
agtccagtgt ggtaaattca aactcaggtt tggaggtaga tacatt
       454
330
DNA
Homo sapiens
<400> 454
tttttttcaa ggattcacaa actatggcat tttatttcag agcctttgct tacatttgta
                                                                         60
caatatatta cataattett cattgtttgc agatectaat atataettta tagettttat
                                                                        120
                                                                        180
tctataagct tttttcttca acattttgct gtcaacaaat ctttacagtc ctgtacaaat
                                                                        240
ttgaataact tgaaaccatt ttcaacaaaa ttagttactg taagcacaca ctacaagact
qaaaatqctt ttcttagaaa agttgaatgt aaaggattct gacacgttag catctacaac
                                                                        300
aaaacqcatt gaaattccca cgtcgtattg
                                                                        330
       Homo sapiens
<\!\!400\!\!>\ 455 thtacacaag aaagtgctgc thacattgtt gttttgtgtt atttagtgat ttgttcagcg
                                                                          60
ctcatctctt ccaccagact gcgcttcctg aggacaggga ccttaaagca cctcacatag
                                                                         120
ggtgcgcgtc tggtacactg tcgccgagta ccagacaacc agtgtctcac acgggggaag
                                                                         180
acgatgaaga cagcaatggc atccttggga agatgggcag gagaccccat gacacctggc
                                                                         240
acctgggcct aagctgggag gccagcggcg tccccaggag accacggccc aggctgggag
                                                                         300
ettgacegge cagaegeeeg tgggtgggee tgggeeteee geetgggage etceagtgtg
                                                                         360
gcgcctggct ctgggtgggt aacaggagct acaggccagc aatgcccttc ctgtcctcgg
                                                                         420
                                                                         459
cctggctcaa ggactgggtg cagagggcat cagcgatgc
       456
418
DNA
Homo sapiens
gaaatgtaag tatacagatt ttaatttatt tttaagaata attgtatatt ttaaaaaacag
                                                                          60
gacacqtact gtatgagtaa acagcqtggc taacaccaag tccacactgg taagcttttg
                                                                         120
agaaccattt acactatgtt gacagtagta ctgctgcagg cagacagcgg aagaataaat
                                                                         180
aatagtgctt caagaagagt agtgattgag aggataggta aagagggcgc ctcatcgtgg
                                                                         240
aagctagagc aggaacacct ccccagtagt gacatgtgca aagttccaga tctccacgac
                                                                         300
aaagacaget caacccactg gaacaaacag actcccaatg tggctggcaa ctgcgggggt
                                                                         360
agaagaactc aggcaaagta ggcacaggaa tgggggagat gagagccaag ggacaaac
                                                                         418
       Homo sapiens
<400> 457
tttttttggg agggaagaca tttactgtag gtataaaggt ttactattat taacaagtta
                                                                          60
tcactagtat ttacatgttt ataaaatgga aataaaaatg acatacacgt ttggtgccaa
                                                                         120
aagtggcaca tccaaactaa tatcagtata aaaataaatt ttcaagctat gtgtttttaa
                                                                         180
aataaaggtc attgaaacag taagggggaa aaaatctgca tctggcatgt gttgagatgc
                                                                         240
aatcatcatc acagcaaagc agccctggg
                                                                         269
       458
286
DNA
Homo sapiens
```

```
<400>
caccactaaa aaaggetttt attacaaaat gaattetaat aaaaccagge etggtettea
                                                                         60
accecteceg etgggtagag geeetagggt gggetagggt aggggagatg ggggtggggg
                                                                        120
gccctgaaag aacagagcag gctgccctcc tctcatcagt ctcagctgct gccctccttt
                                                                        180
                                                                        240
tataaagggc tagaagagct cttccaaagc cccttgagag agtccccatc cttccaacca
ggatccttcc aaccactgct gtcacaggac cttagcaatg ccgcat
                                                                         286
       459
375
DNA
       Homo sapiens
<400> 459
tctcaggacc caatagattt tatttcaggt ggggataagg gacaagcaat gtgaagacag
                                                                         60
ggaaggaaag aaggaagtct ctatgttctg aaggactgcc taccccactg ttgagagtgc
                                                                        120
cacattetge cettttagea attttaatta atttttaeta ggaetttggt aacaccacag
                                                                        180
aaaccctgtg gcttcctgtt aaaatgactg tgttacatgc cttattttta ttaaagtgga
                                                                         240
atttaacaaa tacttttatt attttgaagc atttcatcaa ttctcggtgg aagcactaca
                                                                        300
tcatcgaatg ggaaataaca aatgaaaaat gaaaaaaaag attatccatt cacagtaagc
                                                                         360
accattttac tagaa
                                                                         375
       460
451
DNA
       Homo sapiens
<400> 460
ttttcctgaa taaatttata atcttagtag aggaaaagtt ctgatgtgat tttaaaaaca
                                                                          60
quatceette tegeettaet taettggtae tttaaccatt acaaatttat teaggaaaac
                                                                         120
taaaattatt taaagaagag acatctagtt ctagagtaat ctggcacatt catatgtgaa
                                                                         180
aaaaattaga aatcacttga tacatctaca gtacacaaat agacgtataa acattgtatt
                                                                         240
ttaataatac tctttgtcac ttcaatttaa atcattccat tatgaaaatt tcttaattga
                                                                         300
agggagacta tttcttcaaa actctaaatt aaacagagct ttatcaatta agtttacagc
                                                                         360
aatatagcct ttagaaatac atatttcttc attttataat aatacttccc ctttaaaaaat
                                                                         420
                                                                         451
ttgccatggt ttgtcacaga tttaaaatac a
       ĎŃÁ
Homo sapiens
<\!400> 461 ttttttgta tgaaaagatt taatgaatta tgagccattg atcattacaa actttaagcc
                                                                          60
ttaatatttc ttctttccta tgtaaaacca ggtaattaaa acagcctgtc tcagtatgac
                                                                         120
agaagaccat agtagggata atagtaacgt ctgcttccac atctgcatgc ttcgttaacc
                                                                         180
aaccaaagaa agtgctccag gtttcccaag tcaacaaagt atactcagtt acactttccc
                                                                         240
tgatcatact atgaattgaa acagaacact cctttgactt ttaatagcac ttttcatcca
                                                                         300
cggcacaagc actttcccat tattttctcc tttaccctca atatccttgt gaggtagtga
                                                                         360
agggagggag caaggatttt ttttttctat tttgcagatg agaaaactca aggtgaattt
                                                                         420
tacaacagtg gttctcaacc ttggcagcat attgaaatga ccagaaagtt tttaaaaaat
                                                                         479
       462
240
DNA
Homo sapiens
<\!400\!> 462 tactgettte ttgattttat tteaaaagta cacaaggtea caaaactaga geaagttgtt
                                                                          60
tttcttaaca aattttgttc ttacaaattt caaaatctgc accattggat atataagcca
                                                                         120
gaaatcgtac atacaaaatc tgaaactgac actgtcagtt ctatactttg cacacgtgaa
                                                                         180
gtgtcagaat attttcttca gtagtacagg tgtatttatc actaaaattc acaattaggg
                                                                         240
```

<210> 463 <211> 435 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 463 taagtgatga aagactgacc agtagaaggt ggtgaagatg aagaatagtg gaactggcaa</pre>	60
gtaagaactg ttcagacaag cattcattgt gtaatatcca taaacaaaac tataatccaa	120
aggacttcca ttttagtatg ttctgatgat gtactctaga ctgtcacctc ctctggctta	180
cagaataatc cagaactttc catagacatt aatcttgctt aacaaaggct gtttacctat	240
tatacacaca catttttaag ggaaatatat gtatatagct ttatctatac acacacatat	300
acatacgtgt atatatagat ttatacaaat gtataaataa acataatact tttcaatctt	360
tecattgaca aggeaagtte acatteagea aagtgecace acateceata tacacatete	420
	435
tgtacagata tacac	133
<210> 464 <211> 387 <212> DNA <213> Homo sapiens	
<400> 464 tttgaaggga gcagggca ggcacgcgag ccacggccac gctttattgc ttaagacgca	60
cacagaacac agaggaacaa acaaggagga aagggcgcca cacacagccc agaccaggca	120
ggagcggccc agccgcggaa gagacgttcc ttgcaaggca gggccctgct ggatagcacg	180
ccccctggga cgagggtcag ggaccccagg actgcacagc tgcagacttg ctgggaacct	240
ggtacaggtg atacgeceae tetegeetgt tgtcagaget tetacetetg catecageca	300
tgcacccacc atttccccac agggtacagg ggcagccttc cttgatccac agccaaccct	360
tctcctgctg tctctggctg tcagtga	387
<210> 465 <211> 443 <212> DNA <213> Homo sapiens	
<400> 465 tttaggtaaa agatttttat tottatttaa ooatgotgoa tgtatacata caataccaat	60
atatacaact tgaacaaata caatttatac ataaaataca atgaaagcat ggcttttgaa	120
actgatgcaa caaactgtaa tttgtaattt tggccagcat acagtattat agtaatgcta	180
ctgaagttat tcattaaatt agtcagacta cagtataagt tcaaaggcac tagaaacatc	240
tatgttttct tctagtattt ttaagaacaa aaaataattt aaaataaaac aaatgtatac	300
attaggaaat tgggcagaca ttggtgtact taaatgtaaa cgctacccat tccttaattc	360
acagccctgt aggaaagaag actttcctta agagttaagg ggaaggatat taaaaacaga	420
ctaaaaggaa acaaacaaaa cag	443
<210> 466 <211> 531 <212> DNA <213> Homo sapiens	
<400> 466 tttaatattt aatatttgta gtttaatttt ctgaaccttt ggcttataaa tttttctcaa	60
cttacattta aaaatgtatc aatgcacctt cttcagtagt accacatgaa aatataaacc	120
tcgttcttcc atatcttcta cgcaggaaga gtgaatgaat agtaccctaa atatcccgca	180
aagttacttt gtgtacttga cggaagatta gggaaaaaca atccacttcc atatcttgag	240
cagtagttaa ctagtcttct acctcatctt cccaaatatc gtcgtcaaca tccacagcat	300
aaaacagccg gttaaaacat ggtgaaccag ggtcattgaa atgtttgtaa gggcgcgact	360
ctagagagag aacccatgca aatccaacag aaatattgca tacagccagt acatgtcatc	420
ttgttacatc cgtctaattt ctctatggga gttccacaac atgggcagct ctttgagttc	480
ttetetagee acteettact ttecatetet teeagtgeet tetgaateae t	531
<210> 467 <211> 416 <212> DNA	

<213> Homo sapiens	
<400> 467 ttttttggat gagtcttccg ttttattaca aaaatgaaga tcagtttgat caaaatgaaa	60
gettgttcac aagttttaca tgaatattet aaatacaaag teteetgaaa caacataett	120
ttgatatgat tttcattttt aaagggatgc aaacattcca ttttctcatt tataatctat	180
tccaaggcaa agtattttaa taatgtatcc tttctgcagt tagatcacaa ttcacaagta	240
taactgaaac agacaaaacc ttgtcagcaa aggttaaaag tcctttttc tttaaaaaaa	300
aaaaaaaaag gaggtaaata accagccctt atgtgttttc agaattttgt actacactga	360
catgatttgc agtcaggttt ttcttcctac cccttaaggc tacaaaattc tgttgc	416
<210> 468 <211> 338 <212> DNA <213> Homo sapiens	
<400> 468 qaaaaatcaa aaattttaat cttatcatct ttacataca	60
attgtetttg aaaaggteec cecteeceeg ceaaaatetg tagaceataa gtettggeet	120
acactgacct qqtttqtaaa atatcttcct ctgtqtactt ttcccttcag cctcaggctc	180
ttqqctqatt cqctcacaac aqaaqcaqct tqqctttcct ctqqaaqtac caatttqaaa	240
gcccaccagc ccgcaaacct agagtgtatt ctccacccct gggtcacaga acttcgttct	300
coccggctct gtaacccaag gaccctacag cctctgag	338
<210> 469 <211> 337 <212> DNA <213> Homo sapiens	
<400> 469 tatccaacca tttataatct ttattctata attctccqcc aqtqctaqaa ttttcttccc	60
aaatggcctc aattcggaca ctgaataaac gataatgaat tttttaaagc tgtgcttaaa	120
tataaacaaa ataaaccgct aagtttttct ggctccaagc acgccatatg aagcacgcca	180
atgtcactta tgtgccctga tcacattcag gcaaagtgtt cttcacttta aatactcctg	240
tgttccatta ttgtttaagt aaaatcctat ttcaaatgcc tttgataaca gagaaaccgc	300
ctgtagacaa actctttgaa agtgactgaa ttaatgt	337
<210> 470 <211> 393 <212> DNA <213> Homo sapiens	
<400> 470 ttttttttt ttttttctc tgttatgatt ttatttcttc aattgttcca atcacagttt	60
ctaatacaga aataaaacta ttcagcgtct ccgttcttgc ttcattttgt ttcacagaga	120
tctgcatttc tgagtttcca ggctccaata gcagttctgt taagaacaga cagccagtat	180
catcetgage actgaggtat getttecatg geegagaeee agecetaete attgegatgg	240
tetggatgtt cactaettga agagecatet ggagggtgte aggatggaat teteceegee	300
aaggcaacac ttgctgatga gcaactttaa ggctaagcca agttttctca aaataatcag	360
cagtaagctg gcgattgggg actagcatga ggg	393
<210> 471 <211> 545 <212> DNA <213> Homo sapiens	
<400> 471 ttttttttt tttttttt tttttttt ttttttttt tttt	60
atttggcacc cgatggcaat acaaaatcct ggcagtggga gtggaaaggt tctctctct	120
aaatacttcc atactatgtc gacccaaagg caggacttgg cagcaaggct cacaaaccac	180
ccaaacaaat atttattgag caccttgact actacaggcc tagcattttg ctagggacca	240
tgggagatgt gaaggaagtt atctcacaca tgatatgtct tcaaggagct aaaaatgcca	300
gtggataaaa gcaaaacaca tggaaaaaca aagtacaaat aataatccgt gtatattgtc	360

aaaaggaaca ttttatcaaa aggtaggatt gtagctaagg ttggcttgcc ttcttccctc	420
ttttattcaa caaacattta atgaaggccc actatgtgcc aagcacttgg tacatgatgg	480
tgaataaaac aaacaaggtt tctgccctca tttacagcct ggtaggggag acagaaatga	540
acaag	545
<210> 472 <211> 412 <212> DNA	
<213> Homo sapiens	
<400> 472 taagatcaat attcattctt catttgccct cgtaacgaaa atagattttt aaatgcctca	60
aatatacaaa catcattgat gcacacacat tccagaaatg cagaggtatg ctgctgccac	120
ggggtagggg tgcgggaggc ggcctggcct catggcgcat gaccgtgccc cagcccgggc	180
ctggcaggta gctggccact gataaatgcc actgggatcc taggagaagc tggggaccat	240
gcgtgaggta ctgaagggga ccatggtgga tggcatcctg ggcactttgt agcttgtctg	300
agggaaaggc ctctgctgcc atagaaaagc tggacacatg tcaccctggg gccctgacat	360
cctaaaatgc cccactgact accagtcact aggagaaagg tctccggcta tg	412
<210> 473	
<210> 473 <211> 263 <212> DNA <213> Homo sapiens	
<400> 473	
ttttttttt tttaagatgt ataaatgact tacttttaat aataaatatt tcttgattta	60
taatgtaaat acaattaaac aaatatgggt tactcgaatt aaaaaaatgg cacatgtaaa	120
tgagcatttt agtacaaata attaaaatgt atttatatta tatagaaatc tacacaatgg	180
aagatactac taaaatgttg ctctacagca catcacccta gacaaaatag aattctagaa	240
ttctctttaa aaaaaaaat cac	263
<210> 474 <211> 317 <212> DNA <213> Homo sapiens	
<400> 474 titttttitt ttacaataaa catttattaa gctgtaattt tcacaatatt ttaattctgt	60
	120
tctgagatct acaaatatct ctacataaca ccaaagccag tgatttaata aataagagga	180
atgtatatat cgctttgcaa aaaaatgcct gatacattta tctctatata agatatttgt	240
agaatcagtt tcccaaggct cacgaaacta aagtgcacac acacacaca accatgtaca	
cacacacact attcaaatca aatggattta tattaagtgc caaattaaat gctatacaaa	300 317
atttataacc agataca	317
<210> 475 <211> 295 <212> DNA <213> Homo sapiens	
<400> 475 ttttttttt aaattaaaat gaccttttat ttgcctggac aacaaaaatt ttccatgatt	60
ttgctttttt gaaacaatga taagaaattt ttttttaggc aataagatac taagttgtat	120
caacaaactg catgggatat ttccacaagg agaggatttt gttccctgat ctagtttacg	180
tgacattttc ccttatgctt gctttctctg agctgactct tcttaaactg acctagatgg	240
taccctattt caactgactc agagttcatt caaaaatatg atatggtgac atggc	295
<210> 476 <211> 526 <212> DNA	
-	
<400> 476 ttttttttt tttttttt tttttcagag acctttttt attaaatgtg taaaaagcag	60
ttctcatctt acaagctcaa aatcagacga atgtatgagg gtgtataatt gttatattta	120
taaactgtat cacccaaaaa ctcaatgagg acacaatcta tattacattc aacatttgca	180

```
tatttacatq atacttactq caaaqtaaat acaaaatqaa ctcccatcat tttagttcag
                                                                      240
aacacaggtg atataatttc aaaacaaagg caatttttt caacaaagaa cagaagtctc
                                                                      300
ccaagtacca attcactatt ttgcagaaaa atacaacact aattataaga tttccattcc
                                                                      360
agtttagtca gtaagatgcg ttgtttgttt gtttgtttgt tttgttttta gaaacagggt
                                                                      420
ctcactcgqt caaacgggct ggagttcagt ggtggcgatc agattcattg gagccttgaa
                                                                      480
cccctqqqct acaaaatttt tcccactagg gccccaagag ctgggg
                                                                      526
      477
702
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 477
ttttttttt aaaaagttga gtattttat tgggtcttca aatctgggtc ccacagtcct
                                                                       60
catttgatgt cactcttagc tctgtactga tctctcctct gacttttacg gagggcttgc
                                                                      120
anaagtagcc tattgcagcc aaagtttcac tccaaagcta cctctctaag gtctaaggtt
                                                                      180
actatggtaa agttttatac aacagttttc cttaaaaaata ttccacgatt tgttactccc
                                                                      240
aaacaaaata agattatgca ccactcggag aaattagtca ttctgaagat gtctaagaac
                                                                      300
tatatcactg ccaaagaaca tttctcagtt catattcttt ccttcaattt tcatttgcac
                                                                      360
atccacactq tqqqqttcac aaqtcatctq ttttccatga tcttatgqtc aaqtcaagag
                                                                      420
gacttagact tatacatcat tttccaacag ctgggatgcg attcacagtt tggtgcatac
                                                                      480
ccatatgtat gaaaataaga acctcactcg gtttaatcga taattcacat cgagtctcag
                                                                      540
attggcttgg gcagtcttca gtactcctca catgagatac tgntacaggt gtcaggttca
                                                                      600
                                                                      660
ggtcatcgga ttgagtacca gggctatcgg accagagcgt cagtgaagta accacatctt
                                                                      702
gctcacttcg acttgcagta accatagcga cgggactgtg tt
       478
441
DNA
       Homo sapiens
ggttcaacag atacacactg attatctaac ttatcatcaa ttggaaggtc tagttcctca
                                                                       60
ttaaacatgc ttttcttatc tcccatgtca agttctggat ctgtatatgc aatgatatca
                                                                      120
aacteteetg aeettaagag gteateeagg ttgggateat tagttteeaa attatetaaa
                                                                      180
gtatccaatt caactacctt gccatcctct gtatctaaat ttaagttttc aagatcttca
                                                                      240
tcatctaagt ctttgacttc aaccccctca aggtctttaa catccagttc cttcacagaa
                                                                      300
gggtcatcag aatcaagttt ttcctctaga ccatcagaag gctgggtggt tatctgtaaa
                                                                      360
ttatcagacg ttgtttcaga cggtacagat gttgacaaag gagcttctga aaattcacca
                                                                      420
cctagtggat ggttcagagt c
                                                                      441
       Homo sapiens
^{<400>} 479 ttttttttt ttttttatg ctcaaactaa ggcattttat tagctggctt tacaacttaa
                                                                       60
ataatatett ggettteaaa ggaacagett eeactaatte caaattaaac ttteacaagt
                                                                      120
ttacttgttt ggggagggac attcttatgg tcaccacaaa atacttttat tataaccttc
                                                                      180
240
caactgcctg aaaaacccaa ttaagttact tttccttaaa acatgtgcag tataattgaa
                                                                      300
tcaaaagaga aaactgcaaa tacattgtgc tttggccaga agtagagttc atttcatgat
                                                                      360
gattcagtat cttcagatac tatttttgac acttgccata aatcttagca aagtaaatc
                                                                      419
<210> 480
-211> 474
```

<212> DNA <213> Homo sapiens	
<400> 480	60
tttttttttt gatctgcaaa attttattaa gcaatagctg gacaactgtt acaacttcaa atcatcaaga aaaaaataag gagattaatc cgtctcagta ataaagacag aaaataactt	120
ggacaaacca catcgttttg aatgcaaacc attaatgct tctagaatat ctcctgcaca	180
atctaataca caaaatacgt aagaagaaag gcaaataagg atgagctcat taaaacgcat	240
ttgggagtcg caacagatct tgcttggaaa gtaaaaccag caggatgctg aattaaaaaa	300
caaacaaacc aacactggag gaactgaggt gcacaagcag tgcacgccac tgccgaggtc	360
tggacatgaa catgctggtg gtctagtttg gtctggggcc tatgcacctg catcgtgcac	420
ttacqqttaa aaaaaaaaaa aagggaaaaa gaaaatgcca gtagtaataa actc	474
<210> 481 <211> 450 <212> DNA <213> Homo sapiens	
<400> 481 tttggttttc caagtgttag ccatttataa ataagtacat ttgctttcat acatacagtt	60
cettgtacag atgacaatet gtatacatgg ggcaggaaaa tgcattcatt tgaactttte	120
acatctatct cacacagete acatgtacag acaataaaac tgetcaagea agtacageaa	180
aggaaaatgt ctttccttat acacaggggt agatgcctct gtggggtgtg gggcatcccc	240
actgcacggc ttcacaactg tgtggtgttc aatatatcag gagagagaac aaacatgcat	300
tggataatat actgtacaga gaaagtcctt tacatctgag tcatagaaaa cctaaaggaa	360
aactaagtgc attaaagctt tttccagcaa gtgtcttgaa aggacagcaa agaggaggaa	420
gaatcaaaat catattagta caaatcactc	450
<210> 482 <211> 135 <212> DNA <213> Homo sapiens <400> 482	
gatcccaaag atattaaata tatgcaaata ttccaaagtc tgaaaaaatc caacatccaa	60
aaacacttct gacccaagca tttcagataa gggaccagaa ttattagatt aaataaggta	120
tattattaag ttaaa	135
<210> 483 <211> 205 <212> DNA <213> Homo sapiens	
<220> <221> misc_feature	
<223> n=a,t,g or c	
<400> 483 gatccctcac tttatttata ttcccactat aaccagtaag ttcatttcat	60
atgcattaat cattgnatgn nagnagttaa tgaaaacttt tcctgttaca acgcccattg	120
ccggcaatga acgtaccaaa accgccaagg aagtcattgt tattgcacaa tacatgagga	180
cctggagctt ttccaaaagc ttaaa	205
<210> 484 <211> 409 <212> DNA <213> Homo sapiens	
<400> 484 aaacaataac agrggtcaac cacagatgtg gacctccagc aataaaagca ggaattcagt	60
gccagatact cagcatatta ggtttcctac gtaagtcaca gggtaatatg ttctaaatat	120
ctctaatgtg atccaaaacc ctaaaaagag ctggcacaaa accatcgtga atgactgcct	180
ctcttgatgt aaatttttaa aaatattatt acagtatcat agtccccact aacaacaact	240
ggggtacata taacaatgta ttgtgaaatt aagtgtattt attctcttta ccaatagcaa	300
atgytaccct accttagtaa aaccaagact tgcttcaatc aatbctgttt tgtaaaatag	360

caaagcaacg aatgctgaaa	tcattcaaag	ctgcattact	tggggtaaa		409
<210> 485 <211> 383 <212> DNA <213> Homo sapiens					
<400> 485 aaaagctaca aattttatt	tagctattat	taaqqcacqt	aggcacacgg	acaqaacaqq	60
tctcataggt aaccagttgt					120
atcttttatc ataaaatgcc					180
tgttttgttt aagaaaaata					240
aagtagcctg ttgatagtgg	acctagttta	aagcaccaca	caacaatgtg	tgtttacatc	300
accetttat tteatagtta					360
tggtgtttaa tcattaaaca	taa				383
<210> 486 <211> 204 <212> DNA <213> Homo sapiens					
<400> 486 agaaagagga ttgtaggttt	tattgactaa	gaagataaag	ggatgcaaat	tagttataca	60
ggttttaatt ccagacaaca					120
vcatgtttaa cttgaatatt	caggtagggg	rttttattgg	aaatacgggt	ctagrgctag	180
tggaaggbga acgcctagag	mccc				204
<210> 487 <211> 425 <212> DNA <213> Homo sapiens					
<400> 487 tttttttct gaaaggcagg	gaaagcttag	cactttttaa	tgcccattcc	cattcaaata	60
tactcaattt gaagttattc	aataaagtca	aataataggt	aaatacatat	gcatacaaga	120
aaatcagaaa atcttaaaat	atttaatcca	aaatgaagca	agaaggatct	tatgtggtct	180
gaatattgtc actttttata	aaaccaagcc	tttcctcctt	cagcagagaa	ggctgaaggt	240
gaacaggacc aacagagatc	aaacaggggc	acagaacaga	aagtaggggg	aggaagaaga	300
gatgttttat tccagaaatg	aaggaaagta	aattatgttt	ttgtatccca	aagtcttagg	360
agggttaggg catgggtggg	ctcatgcctg	taggtcccag	cacattgggg	agggccgagg	420
caggg					425
<pre>&lt;210&gt; 488 &lt;211&gt; 141 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 488 actcngcagg tagcctggtt	ttcagaaaca	acgatgaatg	atgcaaatat	ctagaattca	60
gtgagtattt atcatagaag	caacagcaag	accactacta	ttgctatatc	taagtaatat	120
cccagttaat tgtcctagag	t				141
<210> 489 <211> 421 <212> DNA <213> Homo sapiens					
<400> 489 gagttttatt taatgtcggg	agcagattgg	gtaataaaat	gtattttgag	aataagactg	60
ccttttgacc ttttagggtc	tagggctgta	aagtgtctca	gggttgctgc	caaacaagtc	120
atgaactggg ctggattttt	atatttgatg	aaaaagagcc	taaatgctat	ctgatttcgg	180
ataaagaaaa aggagcatta	accttgacta	tgcctttagc	tccagccacc	tttttaagag	240
taaattgctg ggcaggaggg	ggagggctag	tcacggaacg	aaactgtaag	ccggaccagg	300

```
tgtgaggagg ggaggcgata aaaagattat agggtggagg agcagaggct gaggaagaat
                                                                          360
                                                                          420
tqqqacctaq ctcggcctgg cgagaagcag cctgggagga agggagaggt cagatgggtc
t
                                                                          421
       Homo sapiens
       misc feature
n=a,t,g or c
<400>
àcagaaagga tgacttttat ttccatcctg aatgattcac accattattt aaacatctga
                                                                           60
aaaatcctga aataatttaa actgaaggca cagaacaaac caaaatattt aactatcaga
                                                                          120
                                                                          180
actaaaaatc gagaaaatcc aaatagttct atagtaacaa taaattatga acaagtttcc
                                                                          192
qtcaacanaa ta
       491
433
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 491 ttttttaaaa acttttattt tagattcagg attacatgag cagatttgtt gtgaattcta
                                                                            60
tttcaattaa catttagatt aggtatcatt tgaaaactgt tagtatttta ccaacattct
                                                                          120
qcatttcttt cttaagatac aaagtctgta ggagtctaat tcctgataga aaaaaaaaat
                                                                          180
gtgggaagga tactaccacc tcccatcaat tcatgttctt ctacttatac tgttcaaata
                                                                          240
tgggaatgtc cctattctcc tctgtccctt tcaaaccaat tcaacctaaa ccaaatgttt
                                                                          300
aaggtgccct taaaagggca aggaccatta tacctatttc aggctggggg gnccaattna
                                                                          360
aaattgggga aagggateet tagggntttt tteeectatg geettteeen ggaaceegga
                                                                          420
ggggggggat tat
                                                                          433
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 492
ttttttttt ggttttacta gtttggaagc agttttaatg aagatggaaa tgtttatcaa
                                                                           60
ctcaacacaq qtacccccaa aatacaaatc aaaatatcat cttcaqctqc atagcaaata
                                                                          120
tgatttaaga atttaacatc attatttgat cacaagcgta aatatgtcac cataaataaa
                                                                          180
tgtaaattca ttgtacaaaa attcccaaca actcttaata caaatatggg tacatttgac
                                                                          240
agtttctgaa acaggattat ttttaaaact ttttaaaacc taaggcttta ttttttccg
                                                                          300
                                                                          318
gggntattgg acacacac
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 493 attatanaaa tagctgcaaa attgtcctct tagctgaaaa tcatggatga cctcagggag
                                                                            60
ggtacagaga ttagaagaaa ataaagtagg catgccaaac atttcagagc tagagtgatg
                                                                           120
```

taagatggta atataggcca					180
cctcgtggcc agcaacctta					240
tgagactggt tctgcaggtg	=				300
tttctttcgt tctaattact	ttcctctttc	cttctgataa	ttccacccct	taatgccttc	360
aaaaactagc ttgccctgat	ggcaaaaatc	ttaatcccta	aaatctcttt	ccnttctaaa	420
attttcttcc cacgngtttt	tagggctgtt	cactcaggan	caagctgttc	taatttaaat	480
gttt					484
<210> 494 <211> 432 <212> DNA <213> Homo sapiens					
<400> 494 acattgtaac aggtttatgc	attttgaagt	gccttctaca	catccaccca	gaggctctgc	60
tgatttcact tatgcccagg	ctataaaatg	cctttctctc	atcccccagt	agagcactgg	120
gatcaccact aggcctaggg	ggcatatcaa	gggtttaata	gactggggga	atgggcaaca	180
gaactggcta ccttagaggc	tctggaatgc	ccccaccca	tccacccacc	aatggaagga	240
aagtcaggca tcgctaaaag	gagtggtccc	tatctagccc	caagtctgga	gcagaaaggg	300
caggtccatt ctggcccaag	tgacattgtt	aagatcctgt	cccctcccc	aatcactgct	360
gcttgccagg gtgcctcttc	acagttccca	tgtggcagca	gtagtggcag	aggcagaagt	420
ggacttattg ta					432
<210> 495 <211> 428 <212> DNA <213> Homo sapiens <400> 495					
aataggttac ttgcaattgt	tattgcaggc	aacaacttgt	acatgatttt	atttccaaat	60
ccacaaaaa caaattttat	acaaatcagc	actgtaaaaa	tgtcaattac	agccccagag	120
gctttgctgg cagaataatt	gtctaaattc	tagaatatgg	gaaacaggtt	tttttctgga	180
ttcatctttt tttttcattt	tttttttt	acaaaaaaa	tttacaagtg	aaatgttact	240
acaaaacttt ttataaggaa	tttttgcaaa	acatttacat	tttaccatca	actatttctg	300
ttttaaaatc attatgtaga	tttaataccc	tatgctgcac	atcaatttat	gtgggatgac	360
aacttagtga catgcataaa	aaaacaccac	aaggcattaa	aatggagact	taaatacaaa	420
tattgttg					428
<210> 496 <211> 250 <212> DNA <213> Homo sapiens					
<400> 496 tcttttttt tttttta	gaagcagttt	attacaaacc	tgagataata	gaaaataaca	60
cttgcagtaa taaaggaagc	agccttgcac	tccacctcca	cactccagag	tataattaaa	120
agactcctat cagacatttc	tatcaccaat	aatgccaacc	tctgtataca	gcagcaagaa	180
cgggcccaaa tcagaagatt	catgttgctt	gctttctcta	taagggaaag	tgaagctttc	240
ggtaagtatc					250
<210> 497 <211> 265 <212> DNA <213> Homo sapiens <400> 497					
à digcaccit tetettattt	tattttttaa	aataagaact	tggcattgaa	acatgaaact	60
tgagttttga aaactaccct					120
gggcttaacc tatgtttctg	aaggtctaag	tctgtgcaga	taaattatat	gacatgtatc	180
tgtttttaaa acactctata	tgctggtact	cacatagaaa	tagaagccag	aatgagaagc	240
ctcccaaatt atcccatcct	gacag				265

<210> 498 <211> 193 <212> DNA					
<213> Homo sapiens <400> 498					
tgttctactt ttaaagatat	ttaatgatgt	ttttcaaatc	agtacaaaaa	tttaaataca	60
aaaatgattt gctattgaca	agtctcaaat	ctgtcatggg	aactcaaaca	agttaccagt	120
ctgttcaccg ttcattgtat	tctataaaat	atttgataac	agtcacccac	tacagacatt	180
cttttcccct gtg					193
<210> 499 <211> 319 <212> DNA <213> Homo sapiens					
<400> 499 tcacatcctt gtaaatgtga	actgtgatac	tatgaagagg	tggaaggctg	aagaattcaa	60
aatgttcgcc ccagaaaata	ttgtctgctt	tggtcttgct	ggttgtacga	gcaaagaggg	120
tatcatcaag gcacagttcg	cagaaatatt	tctttttagg	ggcaaggtcc	ttggcttcaa	180
tgatccataa acgaagaaca	ttttcagctc	gcctgcaatt	gtccttatta	ggttgaactg	240
tcctgcgaag gttttccatc	cacttgtctc	tctcagaagc	agaattacag	ctgaagcatt	300
tacttccact taagtaggt					319
<210> 500 <211> 453 <212> DNA <213> Homo sapiens <400> 500					
gaattttcaa ttttacattt	aattataaga	ccacaataaa	aagttgaaca	tgcgcatatc	60
tatgcatttc acagaagatt	agtaaaactg	atggcaactt	cagaattatt	tcatgaaggg	120
tacaaacagt ctttaccaca	attttcccat	ggtcttatcc	ttcaaaataa	aattccacac	180
actatcaaac taaatcaaga	tttgctagtg	gataaaatta	ccataaatat	accgtactct	240
ctctgaaaca gctacaaaca	tcttgttttt	gcaaaatata	caatgtttct	caatctttct	300
gtccttatct caatttgcaa	aaatattttg	aaacaatctc	ctttaaatgt	tattcttgtt	360
aatgagggca aatcttttaa	aatccacatg	ctagatcttg	aaaacgcttg	agaagaaaat	420
aaactgtgaa aggagtggtt	atttaaatac	ttc			453
<210> 501 <211> 298 <212> DNA <213> Homo sapiens <400> 501					
tcatactaaa gagaattttc	atatttattc	ataaaataaa	tgagatatat	ttccagctga	60
tetetteeaa agttetttat	atggttgttt	aaaaataaat	caaaacataa	cagatacatt	120
tgatgggtaa taagcatttt	acattctgta	ataaatttta	gaagatatta	ggggcaattc	180
taaaaaaaaa taagtttatc	taggattcct	tcaaggtttc	ctattttgct	tctcccattt	240
ttaagttaag aacacaacaa	aaatgctttg	aacaaaagca	aagacagagt	agtgtagc	298
<210> 502 <211> 303 <212> DNA <213> Homo sapiens <400> 502					
ttttttttt tttctgttaa	ttttttacag	ctttatttta	gacagatagt	ttaagaacca	60
aagacatacc tctgtaatga	taaaggaaag	aaaacaagct	ttccttttaa	gaaaccaaag	120
agcacaaaat aagactgttt	cattatacat	aatcaccaca	ggatattagg	cactctgaca	180
gggttaggca agattcttgg	tgtgaggtga	agcacaggca	ctttatttgt	acagtgctgc	240
tgattctaat tttgaaggta	ggtattataa	aagtctttac	ttgtcacctt	atttctggcc	300
cca					303
<210> 503 <211> 320					

<212> DNA <213> Homo sapiens	
<400> 503 atgttgtgaa aaggaatctg taaaagtcag ttttatcaca aattgtaaat attattgaaa	60
ttgattgcaa atttagatca catacaaatg agagtctgac attcaactgt tttcctatat	120
tccaaagtaa acaattcctt tcaacactca agacttaaac aggtattctt agagggttat	180
atgaattgct atcagaagct gttggctaac aagccagtaa tttggttctt tcaccagaac	240
acagttccag ataagcatct ttgcactatt tctcaagtat gaatccccat gtggggggaa	300
aacggatata ctttcaatag	320
<210> 504 <211> 412	
<pre>&lt;2112</pre>	
<400> 504 ttaaatgtat aaccttaaat atttatttga gaaaacaaat aaagatccaa atacgtgagt	60
tgatcatctg ataaaagtaa gagttgacaa aaaaggtaca tcttctccaa tccgaaaaca	120
gaaagtggga aagatcaagg tatcactaga ggtcaatgaa acaaaacata caatagtgga	180
tgacaaaagc caatctctga atctttgaaa agaatataat aaatgaacat ctgaaaccag	240
tgatcgagaa atgttttaga taaggcacaa aaagatacca agaatgttaa cactaggctg	300
tacatcctaa aacagtcaga tgagctcact gttataattc tggttcaccg caagaacctt	360
agcacaaaga aaggactcaa caaacatttg gatccatgaa taaaattatc tt	412
<210 505	
<210> 505 <211> 351 <212> DNA	
<213> Homo sapiens	
<400> 505 aagacaaggt cttactctgt tgcccaggcg ggagcacttt gatttaagtg aaaaaactca	60
atgcatcctg gaggatatcc tagaacagaa catggaactc ttctgcattc cttttaatag	120
ttgcatagaa ttccattgtg tatatcgatc gtgatttctt ccaccagatt ttgttgatgg	180
gtattttttt gggttgtttc tggtcttttg ttctcatgac tacatcttaa ccagtggttc	240
taagatgtgg tacccagaac aacatcatta ctacctaaaa atctattaga gaatgaaaat	300
tattgggtgg aagcccagat ctactgaatc agatactctg aagtgaggcc c	351
<210> 506 <211> 497	
<212> DNA <213> Homo sapiens	
<400> 506	60
tttttttcag tattttcctt cactttaatt tttattgctt ctccagttca gataattcag	60 120
cgcttcctct ttcttcttcc tcaccttgtt catggctggc tgttccatca gcagaacttc	180
cagcgattgc cacattcatt gcataagaca aaggtagtca tgggctcatc agcactgcgt gtctgcacct ggttataggt gcagttcttc ttcttgcatt tgctgcactg gaagaggtca	240
gtggtggtgc cgccagtctt ggccatctgg tgctcacgga tggcctcctg ggtcatggca	300
ttcctcaact ccctcagttc atcactggcc atttcctctg ccgtcatctt ggctataagc	360
ctgcggagat ggccccactg agcacgttcc gccgcacgcg gggttcctgg ggtccttgag	420
gttgcttatg cggctgcgca cgcggttccg gtacttcatg tccgtgctct tgagctcttg	480
gtagatatga tettega	497
<210> 507	
<210> 507 <211> 449 <212> DNA <213> Homo sapiens	
<400> 507	
ttttttttt ttttttgat tattgattta ctgtgtaatc aagagcaacc aaaactactt	120
ctcaattaaa agtacccaac aaaacttttg agccttcatg ctacttcaag ttaaaaagaa	120
agcaatgcag cttgtgggtt tcagaaaact gggccatccg gatgttcatg cagtacaagt	180 240
ttcaccacca tactatttcc gagagttcac atttgtcaaa gtgcagttaa cccaaagttg	∠ <del>4</del> ∪

cagcgacagt atatcatgcc ago tgcactgtat tcagatagga aga attacagcag caccaactcc tgt	ccctgag tgaccaccga	cgacataaag	gtagttatcg	300 360 420
ttttgatgag gatcgtatct ttc.	aatgct			449
<211> 398 <212> DNA <213> Homo sapiens				
<400> 508 ttacaaaaga aaacacaaaa cca	gaattta ttgaaagtag	gtaccagctc	tgattagaac	60
aatcagctca aagataccat tac				120
ataaaagaac ttaaaagaat aca	acttgaa caggactgtt	ttactaaaat	ggtcttgttg	180
caaaataata acaaatacca cag			=	240
ggggatgagg actctagttc tca				300
aggctggctg gagaatgagg acc	tcactgc tgactctgct	taacaaagtc	catgccccag	360
gcacaggcac acatggaatg agg	ccaccaa gcaagtca			398
<210> 509 <211> 457 <212> DNA <213> Homo sapiens				
<400> 509 ttttqtctaa aqtactttcc tcc	atccatt actcactcta	aatqccatqt	gtccttacgt	60
attacaaatc catttctcta act	actgaat tttccattta	actcatggca	ttaggatgct	120
gaaatgaaaa aagcagtcag tta	_			180
ccttaataca gtcttcttta taa		_		240
aataaaagga ttattaagat gag				300
gtctgtaaaa atgaatccct taa	atcattt aagaccaagg	caataaacta	caaactgaat	360
ttagcaaaaa taaaggttgg agg	gactgaa tggagtatgt	tatattacgt	cttgtgctta	420
acagacaagc acagtctttg ggt	atcagta aatttac	_		457
<210> 510 <211> 391 <212> DNA <213> Homo sapiens				
<400> 510 gcagctgttg taaaagtggt tga	gttcttg atttgattct	ctgcttggtc	actgtagatg	60
catagaagag ctactgatct gtg	tacattc atccagtatc	ttgaaacttt	gctgaattat	120
ataatcagtt ctagcagttt tct	gggggaa cacttagggt	ttggaaatta	aataacctgc	180
tcctgaatga gctatgggtc aaa	aacaaaa tcaagatgga	aattaaaaaa	ttcttgaact	240
gaaagacaat aatgacccaa cct	atcaaaa cctctgggat	acagctaagg	tggtgctaag	300
aggatagttc attgccctaa atg	cctacat caaaaattct	gaaagagcac	aaacagacaa	360
tctaaggtca caactcaagg aac	tagggaa c			391
<210> 511 <211> 411 <212> DNA <213> Homo sapiens				
<400> 511 ttttttttt tttttttttt ttt	gtagtaa aatggccaga	tgtttattat	tttgttacat	60
tatttccatt gcatattcca cat			-	120
cacaaaggta caaggaattt cag				180
acggtttcaa ttaaaagcat aga				240
tctcaagttt tgtttcagga agc				300
ctcatctcct agtgctgtcc tca				360
ccagggtatg gaataaggag atg	agagcat gctctgccaa	ctggctggga	С	411

<210> 512 <211> 269 <212> DNA <213> Homo sapiens <400> 512	
tttttttta tccagagaga ttaatacaca gattaataca caaaactttt gtaaatagca	60
ttccagttca aagttgcttg tgatcatagc cacgtgtgaa ccgttagaca agtgtatgct	120
atgccccaaa atgttttata attcttcagt gcagtttctt actgatgttt cccttaaaat	180
taaggettaa tgaaagagaa ateeatagta ttatgaactg attttetta gettetgaat	240
taagtgcact ctttccaaaa tcaagtggt	269
<210> 513 <211> 366 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 513 ttttttttta gtgtagatat agacttttaa aggtaaaaag aaagaataaa gatggagggt</pre>	60
gtgataatcc tatgaagtgt ctgggtttgg gtcctgaggg cagccaatta catcccagac	120
tcactggcaa tcaacagtcc aagccagggt cccatcagct gaatcctgag gtggggatgc	180
ttcagtcttt acagaacagg gtcaaggaag agtccagaaa ccgccgtcat tggcttcatg	240
aaaaccgagc acgtctttga gatctttttc aaattctgcc tctaagtcaa gtcctacctg	300
gccaaagtca gaagccttgt aaaatgtttt atggttgcga aacatcaggc gcatgtctcg	360
cacaaa	366
<210> 514 <211> 418 <212> DNA <213> Homo sapiens	
<400> 514 ttttttttt tttttttt ttttttt ttgacaatga gaaaaaattt tatttatgac	60
gatcttgagc agtataaaac tcagaagctc cactgaggtg aaggaaacat ggacatgata	120
ctaagcaaag cctagtcttt tccataaaat gaataagaag tacatttggt ggagtttgag	180
accageetgg geaacaeagt gagaeeetgt etetaaaage attaaageat taateetege	240
atttcgatag ggctatgtag cttttaagta agcaatgtta gaatgagttg tagagtttta	300
tttttgtgaa tatagtgagt gacagatggc aattacatga ggatatttga acgaaggtac	360
ataagcctaa acaatttcac ctaggtaaaa tattgatgtc ataaccaaac tatatggc	418
<210> 515 <211> 195 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
, . <b>.</b>	
<400> 515 gatcagaact gttaccaaaa aacaactgtc agttttattg agatgggaaa aatgtaaacc	60
tatttttatt acttaagact ttatgggaga gattagacac tggaggtttt taacagaacg	120
tgtatttatt aatgttcaaa acactggaat tacaaatgag aagagtctac aataaattaa	180
gattttngaa tttnt	195
<210> 516 <211> 125 <212> DNA <213> Homo sapiens <400> 516	
gatccatgct ttactgtgtt taatgggggt aacaggggtc cctacagccc tcccagctaa	120
acatttggaa caaaacacca gcccttttgt agtggatgca gaataaaatt gttaatccaa	120
tcaaa	125
<210> 517 <211> 353	

```
DNA
Homo sapiens
       misc feature n=a,t,g or c
<400> 517
ttttttttt tttttttt gcttcacaaa tgtcaatttt attgacacta gtgcacaact
                                                                           60
aaatacaata attgcaaagg aagtggaacg tgttcaaaca gaaatggtga caatgagtta
                                                                          120
qaactgcagt tntttcaagg tactacacta ttatttaaaa aaaaaatcac aaanagaaaa
                                                                          180
atgttatcac tacaagtagg gatttaggaa gngagnaaat tctgggcagt ctgtctagna
                                                                          240
gggttaaaac atttcatggc atttgtgagt tgctgttgga gagttgtttt ttatttgtcc
                                                                          300
accgtaatct gggcaacatc cgggggctta ccttcagctc tcggcactgt gcg
                                                                          353
       ĎŇĂ
       Homo sapiens
<\!\!400\!\!>~518 ttaggaagaa ccaaaacttt attattaatg ttctgtttat ttacttattt tttataatat
                                                                           60
tttataaata aactttattc atataaaaca ggccaaacat ctgactttca aaaatggcta
                                                                          120
ctgttataaa atcagaaaca tagagtgttg ggaatactga aatttctaaa cctttatgaa
                                                                          180
taacacaatt gcttaagtta tatccacaaa gaacagaaaa gaggcaagct tgaaaatgtg
                                                                          240
aggatagaaa ggtatcacag tgatgtgttt ttacgaaaca gtaccttccc
                                                                          290
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 519 aaaatcaaaa taaaagatat tatttgagct attttcatac aaactgttgg ttccttatat
                                                                           60
cctcccttct ataataaagg gcatatttta ctgcaaagaa aattttactt tatatatatc
                                                                          120
actagecata aattitigaa tgteattaat tacatgtigt etagtaecat taaccaaata
                                                                          180
gcqtaactat tttatgtcca catttcactt ctgtatttac aaacatatca gtaaagagtt
                                                                          240
aacaatgaga tgcgatcaaa catccatatt atctgttttg tagacagcaa tgtagatgat
                                                                          300
tttgtaatca cctttcatcg gagtgacctt atataaaaaa taagtcaata atttagaggt
                                                                          360
tctaagtctc caaaggggga ttttccaaat ggtaaatata ggaaatgggg tataggataa
                                                                          420
                                                                          453
tgggganttt tagggaaccc ccggccntgg gnt
       520
434
DNA
Homo sapiens
<400> 520 tttctgtttt tatttatgcc tttatttatt tttaccaata gttgatatac ctatataata
                                                                           60
ttcacgtgcc acaaaaatat gagaagatta catgtgaata ttgatctcat gggtgataaa
                                                                          120
gtatacaaaa tgttqattaa ctqaaqcaga aatccattga gaaatgctta taaccatcag
                                                                          180
gtattacatt tacagatgtt gccaagtcaa agttgaacat ccacagtggg acactcatca
                                                                          240
taaactctgt ttaatcttta aaaggagaca gagaaatagc caagtacgta gaataaaatc
                                                                          300
tgcctaatca ttctcctacg attcttctat gcttgagttc gttttatagg agtcttatta
                                                                          360
catgcacgtt tacattcctt cccgatatac atattctcaa ggaaacgtgg catcctgtag
                                                                          420
cccctqctta qaat
                                                                          434
       521
346
DNA
Homo sapiens
```

```
misc feature
n=a,t,g or c
^{<400>} 521 aatcttacct atagacttgc atgattcaag ataaaatgct ttttaaagga gaaaaggtac
                                                                              60
aqaaaataat tttaaattct qccqqaaaqa ctqqtataat qttctaaaqt cactcactqq
                                                                             120
ccataaccta tctttgctcc ttaatttctc attaatccta acatcaccct tagacacagc
                                                                             180
ctggtatete caacgacact cetettaaat aagcettgee tagacetget teteageate
                                                                             240
aactgttctt tctacctacn atgcnctcct ctcccatcca aaggatctct cttttaagac
                                                                             300
ctaaattqag ttcttccagt aaactttcca caacagtcac agccca
                                                                             346
       DNĀ
Homo sapiens
       misc feature
n=a,t,g or c
<400> 522 tgtagagaca ggcgcttact atgttgccca ggctcggttt taaactccaa gcctcaagtg
                                                                              60
atcctcctgc cttggattcc aaagtgctgg gattatagtt gtgagccact gcgcccaaca
                                                                             120
ttcccatgac ttttttgtga aggaggcatt caccaagctt ttcctaatct ttaccataag
                                                                             180
ccaggctctg cggtaaacac cccacaataa atgtttatca gaggacttag cagggaagta
                                                                             240
cattaaatgt taacgcctta atctgatact gaaaataaaa gataatttca acttggtttt
                                                                             300
tnaa
                                                                             304
        523
147
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
^{<\!400>} 523 ttgacaattt taaattataa tttttattcc tcagtcacca ctgctaatcc ttcaatttat
                                                                              60
ttcaaaqtaa cttctqqttt ttattacatt tqqaaqataa aqcaacttat cacatqtaqq
                                                                             120
ttacaactta aaattcgtgn attgang
                                                                             147
        ĎŇÁ
Homo sapiens
       misc feature
n=a,t,g or c
<\!400> 524 gatttttata ttttattatg tgtttccttt tactgaagat ctttgtatct tcataaggct
                                                                              60
ttgaataaga gagtttggta aggtttatgg gtacagatca atataataat aacggttaac
                                                                             120
aattttttt ttttgagata gggtctctct ctgtagccca ggttggagcg cagtggcgat
                                                                             180
actacaaqcc cactqcaqcc ttqqtctccc qqqttcaaqt qattctccca cctcaqcctc
                                                                             240
cccgagtcat gggnaaaaaa agggccctng ccaaaaggcc tgggaaaaat ttttgggnaa
                                                                             300
tcctttt
                                                                             307
        DNA
Homo sapiens
       misc feature
n=a,t,g or c
```

<pre>&lt;400&gt; 525 gcaagtttaa tgtctctgct g gctggcaata ggatatgcac t gctcatacac cttcatagct c tgggaaggaa aggtacaggg d agagccaacc aaggccaant t gggtcaaggt aaggcaaacc c ccttggaaac tctttgnagg g</pre>	tagaaaattt cttttcaaaa caagaggctg tcacctaggg ccaattggaa	gactcttaga aggatgctta tttcacattt atgcccaatg catgtttggg	gtcaatgant taatttaaag tagtccatta gctgtggggg atttaaaaaa	aaaaggatgg gatgtcctaa gtctttgggc atctccacag	60 120 180 240 300 360 403
<pre>&lt;210&gt; 526 &lt;211&gt; 430 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>					
<pre>&lt;400&gt; 526 ctctgtctga aatgggacat g ataaggaaag gctaggtggc g tgaaaggaaa aaaaaaaaga g ccacaaacag aagctaaaaaa g cttgatataa cttctcatct g attaattacg tgggttcagt g ggggaggcct gattttaccc g ggnaaccccc</pre>	cacatetete gttattggga ggtatgeetg aganteatag eetteeetgt	tgctgtgacc aggcacatct ggatgactca ccttttagag tttcacagaa	tcgccatctg cctcttatct atctgattgg ccggaaggga gaggaaaact	gaaaatnttc ggagacaact ccacatcttt cccttgggat tnaaagctta	60 120 180 240 300 360 420 430
<210> 527 <211> 390 <212> DNA <213> Homo sapiens <400> 527 ggctttcata attatattt t ttttcaaagc atttaaatag a cactttatgc ataaaaaata a tgaagatgtg aacagcttct a gatacagggt ttaatttaaa caagttttat ttattttgtg gaagttgcca aaaggtgcac a	agggtaaaac aataataata aagcattcat cacatacaat ggttttcagg	cctttggaaa tagctgagac tttctctgac gtccaccccc	ttaatacaga atgtggtttg ccatacaaca aaaccttctg	agaaatgatt cttctgctct gcttctcagt cccacatcta	60 120 180 240 300 360 390
<210> 528 <211> 144 <212> DNA <213> Homo sapiens <400> 528 gcatgtgcaa aacaccagac a tgtttctcta aatggggctg a ttttgagcag aaggaagaac a  <210> 529 <211> 315 <212> DNA <213> Homo sapiens <220> <220> <221> misc feature <223> n=a,t,g or c	ttcaatgttt				60 120 144
<400> 529 gcttctaaat ataaattttg c aagtttccag ttaaaagtat a ttctcctcct atgtaaggtc g	aaaanctgct	tctaaccaca	gcagcatact	gcttcaagta	60 120 180

```
atttcctcac atattagaca tcctgctggg gtcacagctt ctttgttcca tttgtctttt
                                                                          240
tttqttqttt tttaataaqa cattqcaaac agtaqctatt tcttaaagtg acataatttt
                                                                          300
cgcttttgca ttctg
                                                                          315
       Homo sapiens
^{<400>} 530 ttttttttt tttttaaat gcaacataca aactttattg aacaaaagta aactgtttca
                                                                           60
gtaaactcaa acaggcactt aagagaaaaa ctgactggaa gaacttttat cttaaacatc
                                                                          120
ttacaqtaac ctacttgcag ttgcatttaa ctgagctctg ttgctgtgaa gaatacagct
                                                                          180
catgcacagg tatggatgaa agatttgtac atttctcaag tattcactga atactacctt
                                                                          240
atatacacat atacattaaa tttgaaaaaag atttgacgat ccccagataa acttcatttt
                                                                          300
tqttgatctt ttggaagagg tcgtctaaag agaagaatat gtggttctgg ctcatgaatc
                                                                          360
atggtaatga acccagecta gactetgttg gacaccaagt etectecaet cetetteaga
                                                                          420
catcagatga gttttaggta cttgtttgga aagttctctg gggtaacata acatgccggt
                                                                          480
acta
                                                                          484
       531
287
DNA
       Homo sapiens
^{<400>} 531 tttttttt ttctatctgt gaaaacatt tattctgaga atctaaaatc
                                                                           60
tggacaaagt actggacttt agaaaaagcc tacacaaaat tgtctcattc ttccctaata
                                                                          120
cattaataat ctaagaataa ggaggtgaaa aaaacccttt aaaaataaca ttgctccagt
                                                                          180
                                                                          240
ttgtctgcag gtatgtgatt taaaatatcc ctgttttatt gaggtatagg ctgcaaactt
tggtaaaatt aggaaaaatt aacaaaccct ttcaaaagaa aaaaaat
                                                                          287
       532
428
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} ^{532} tattittiga gacgganctt ggctctgtcg cccaggctgg agtgcagtgg cagagtcttg
                                                                           60
geteactgea agetecacet eccaggitea egecattete etgeeteage etcecaagta
                                                                          120
                                                                          180
qctaqqacta caqqtacccq ccaccacccc cggctaattt ttttttgtat ttttagtaga
gatggggttt caccatgtta gccaggatgg tctcgatctt ctgaccttgg gatctggcca
                                                                          240
                                                                          300
cctcagcctc ccaaaatgct gggattacag gtgtgagcca ccacacccat cctcgcccag
                                                                          360
ttattaatac cttccctctt caagtcctaa ccttgcaggc taattcctcc ctggaagaag
aggattecaa tgeteetgag cataaaaaat teaggteett gaatgaegtg gacceattet
                                                                          420
ccagctct
                                                                          428
<210><211><211><212>
       533
496
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 533
tttttttgag ctttcagagt ggttttatca ttaaattaat atctaatcac ataattcaaa
                                                                           60
gatataaaaa ttggaatgta gaaggtgggg caagcccctc cctcaggact ggaggcggca
                                                                          120
cagggacaga gccgcactga agcgggtgag cgtgcgagaa acatacagcc gagcagntgc
                                                                          180
cccqaacact cagtccaggg tggaagcatc gccccggcac cccccaaccc ccgagcccac
                                                                          240
```

```
300
                                                                       360
ggggggggt gggcccctgg cttttggggc tgccctccag cagccctgga aggacacagg
cggtgatggt gggagaaagg cccctctcc caggggaggc ctccttgtcc tgagcttggg
                                                                       420
ctnaggtctc tgttccagta acagatgctg gtttttgttt tgttttttt tttaagacaa
                                                                       480
ggtntcgcct cgtgcc
                                                                       496
       534
492
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 534 aagaaagaaa ataggaaaag gtgtcaagca tagaggaaca ctcaaaagag acaaaacatt
                                                                        60
gacctcagca ggccaagaac tgttgaaaaa taataagatg agacaatcct ggggctgtgt
                                                                       120
gggcagtcgt gttccctgag gccacatttg gaacagtgca tctttatgcc agaaatttga
                                                                       180
qcccgaqatt actacattgt gatcttatga tcaaacctaa caagacaaag acacagccaa
                                                                       240
                                                                       300
gtggtactgc ttttaatatc tcagagttag ctgtagggat ccaattattt tcagtttgga
tacatttccc ctttatcaat atctccatgt gcataaataa gatgaaagtg gagttccaga
                                                                       360
atcaaaaaga gatgggaact cacatcactg gggcagactt gttccatctg gaagtgtacg
                                                                       420
ggccagtctc tcccacgtgg atttcctgat gtctggcccc aaatcttcct atcgaaggcg
                                                                       480
acatcctttt tn
                                                                       492
       535
489
DNA
Homo sapiens
<400> 535
ttttctgtgt gttaaaataa tgtaattctc cctgtacatt tctgtccaca tgagccaata
                                                                        60
aacatcaaga atacacactt tacagtattt acctgtttta agacattcaa gtcaattcag
                                                                       120
atggcaaaag tagaattcaa tcactagtga aatgttttaa aaatatatat taaaccaaaa
                                                                       180
                                                                       240
aagtgttttt acaagataaa aaataatctt ccacaatgta attaattgca gatcactgaa
attttaactc tttagatgat ttcagttcag ttttttggtt tcaaaatcta gagacagtca
                                                                       300
aacaaaagca caggcagaat ctctatctgt ttttacgttt ctctttcttg ctttgactac
                                                                       360
ttgttgcgct gtttaaagac gatgatgaag gtgctcttgc atgacctgtg gcctttagat
                                                                       420
gggtcaaaaa gtttattccg agatggaaat tcactatggg caggttgtac agctggataa
                                                                       480
                                                                       489
gaacactca
       536
459
DNA
Homo sapiens
^{<400>} 536 catttttctt tttagagaca gctctgaaca cagaatgatt tcataatcag ggacattttt
                                                                        60
                                                                       120
gagacaggag acttcatggt tccaggcttt gagtgaggtg gagaactcct aaaggaccca
cccaggagat gacactgcct gaacagataa ctgtccctgt cgcctcccac tccactctac
                                                                       180
agcgacacco ettecacage agteagetgt tttecaggta caagagacae etcaccacce
                                                                       240
                                                                       300
tggccagttt acagaccagc tttcgagccc agaaatttcc ctgtaggaaa tttgtaagga
                                                                       360
ccactggctc atggggagga aataaatcaa taaaaggaaa aaaaaatgaa taatactgtt
tttttaaaga gagaatgcaa tcatcctttt cttaagaaga cagaaagcca aggcattata
                                                                       420
                                                                       459
tttaaataaa aatttaaata attgaatgat tttaaaaga
       537
401
DNA
Homo sapiens
```

<400> 537 ttttttttt ttttcccgc	a gtcacaaacc	attttattac	ccacattgtg	ctgtgacagg	60
gaggggtctc caatgaaga					120
cttctttctc actgtgagg	c agaaacaaat	ttatctgtat	gtaaactttt	ccagtaatgg	180
gtgatgctgt gacacctgc					240
tgcaggcagt gtgagggca	c agccttctgg	agtgccacac	ctgggtacca	cggcacactg	300
gtgcatcccg ggaagatgt	t cctagggcac	cacatcttgg	gtaccaagag	gactgtgtgc	360
atccaattag accgaggtg	c aaaagccaat	gcgtcaacat	С		401
.010. 520					
<210> 538 <211> 431 <212> DNA					
<212> DNA <213> Homo sapiens					
<400> 538 ttttttttttttttttttt	+ ++++++++	tactagaatt	agtttattaa	agatgcctac	60
ggtgaactct ctggcgcag					120
cgggaaatag gctggggcg					180
gtcgcctgcc cagcagctc					240
cccaggacct ggctcgtga					300
ctgagatgca gatttctgt					360
gtgtgccaaa tgcttccga					420
gtcatcaagt c	5555-5	55	<b>J</b>	33-3-3	431
<210> 539 <211> 188					
<212> DNA <213> Homo sapiens					
<400> 539					
gcaataaata aaactttta	at tcaaacaagt	aactgcagta	cagggcacaa	ttcagatttt	60
ttaaaaaaaa ggaaaggaa	aa caggaaaaaa	atatgttcag	cactttacat	cttcatacaa	120
gtgttgctgt tttgtgtct	a cattcatcca	ttgagcatgg	aatcccctgg	atttgaaatc	180
tttagcgg					188
<210> 540 <211> 346					
<212> DNA .					
<213> Homo sapiens					
<400> 540 taacagtagg aaaaacca	ca ctattaaagt	ataaaatttt	gtcaaggctc	tattttctaa	60
gcctatataa aggccaggt	a gtaaatattt	tgagctttgc	ggcccatgtg	atctctacta	120
cgagtactca accctgcto	c agtaatatga	aagtagtcac	agacaactgg	aaatgaatgg	180
atatggctgt atttcaata	a aatattactt	acaaaaatag	caggaccaac	acttgctgac	240
ccctcacttt cataggttt	t ataaccttat	taacttttaa	aaggtagttc	tacaacctct	300
caaatgagaa tgaaaatga	a gacaaagcta	ctttagtgtt	ttaaag		346
<210> 541					
<210> 541 <211> 384 <212> DNA					
<212> DNA <213> Homo sapiens					
<400> 541 ccgtgtcact tctcactto	et aaatagetet	agacttggtc	ccattgcact	aacttaattc	60
actctccatc atctttgg	_		<del>-</del>		120
caatcgttct cccctttga		<del>-</del>			180
atgcaccact tgggttgtt					240
ctgcaatgtg gcctacaca					300
tgaagttctt ggtggtcct					360
atcctcaatg gacattact					384
	-JJ				

<210> 542

<211> 183 <212> DNA <213> Homo sapiens	
<400> 542 ttttattaaa gcaatgactt attagagact actggtatat gaagctgcaa tacacatggg	60
gatcaattcc tccaatttca tgtttcctta ctatgtatgt atctctttt gtttttcat	120
tctggtaacc agagtacata tgacaggctg cattatttca aatacctaac actgaaagtt	180
act	183
<210> 543 <211> 329 <212> DNA <213> Homo sapiens	
<400> 543 tttttttttg caacaggatc cggtttattc tgccttgggg gtgggtcctg agagtggtgg	60
gtgccacctg ttccggggcg gaaagagggc ccgaggaggt taaggcaatg ggggagaagc	120
agggggctga gcggcacatg cggtgaacca ggccgaggcc ggaggagctg tggtaggcca	180
gggagggtgg aaggcaccgg actgggaccg gccagggcta cagggcgagg accaggcaca	240
cgggcacccc ggaggcgggc acagggtcac gtgacacaga acatgaaaca caggcacagg	300
gtcataggcc agatgcacat ccagccatg	329
<210> 544	
<210> 544 <211> 442 <212> DNA <213> Homo sapiens	
<400> 544 ttttttttt tttttttttt taaattgaaa ggaaactttt attgagtcat	60
gttttcaaag caatctagtt tttaaaaaag ttgaagacaa gacagaaaaa agaacatgac	120
acctaagaga atcagacagg acagacagac gggagcaggg gggcggggac agcggctccg	180
tggaggtcag atcttctcca tcttggagat gaggtcgtcg cagatcctgg tcagctcctc	240
gttctcttta gtcttctgct ccactgtctt ctccagcgac tggatgcgca tctgctcctt	300
cctcaggctg gcctggaggg caacgcttcc gcctgggcct tgctccggac ctgggcgatc	360
teetegtitig ceagetgeag etteteetee gegtgggeet teagggetitg gtacetetgg	420
ccctcctggg tgatccttgc ca	442
<210> 545 <211> 526 <212> DNA <213> Homo sapiens	
<400> 545 tttaagttga aaactttcac cttttcattt aaaaggaagc actttgtggc ttctctttgg	60
catatecgaa teaceageat caetacteet getetetggg gecaetgtta ageaaagtga	120
ggactgcttg ggcacaggca ctgtgatgct gggatagttg atctgatcac caagacggct	180
actaagtcac tagcagggtg ggtggcgtat acagcgtgga tgtgctggac caagggatga	240
ctcacatccc cggccggctg gagccgacag cgagagattt catcacgcta ctcagaaggg	300
cacaccattt gagacttaaa attetttatt tetggaattt teeatttaat attettgaac	360
tgcagttgac tgcaggtaac aaactgtgga aagcgaaacc atagatacga gcgggctact	420
gcgttcaaaa ggctcttcaa ctgttgtgga tcctctgatg ttctcggaga tggtttaggt	480
ggttacatgc cttcccgcac tccttacatt cgtaggattt cggccc	526
<210> 546 <211> 375 <212> DNA <213> Homo sapiens	
<400> 546 ttttttttt tttttttt tttttttt tttttccac agagtgaagt ttattcccaa	60
caaagttccc ctccccctc cccagcccgg gacagggacg gacaggctgg gctgaagatg	120
gggttccagt ggctgagggg cctctgagaa acaaggaagg gccctgggac cccaggccaa	180
gccatgtccg gctcccccag cctggctgag tccacggcgc ctccctgccc agccctcggg	240

aaaggggaga gggcgctggc tcctgggtag ttccaaagtg gagtgtgaaa atagagagat atatatattt atatgcagtg ggcagtccag cgtggcactc acacctctgt ctggaagtca ccatccggtg gttct	300 360 375
<210> 547 <211> 355 <212> DNA <213> Homo sapiens	
<400> 547 agaacaaaat ggttttaatc aattgcgtca ccctcactct cctgggagcg gcaacgaaaa	60
aggetegget cetgececca gaggacagta aggettatgt gtetetecae actgeaggge	120
ccaggctggc gaggcagggg gtgggaagca ggacaggggg cagggaggga gggtgggagg	180
cagggaggaa atggcaggtg gctggaacac aagaaagcaa aggggaccca gctggtcctt	240
gggccccagg gcacgcccct aatactcctg ctctcccttc accctggcta gagaaaggtc	300
acggagaaga gacaggggag caggtcccag cagcaggaga agcagcagca gctgt	355
<210> 548 <211> 225 <212> DNA <213> Homo sapiens	
<400> 548 ttaagaacaa agcggagggg tttattatag ggacattctg aaaccacaac ggaaaagatg	60
tccgtacagg tggatgggga tggagatcca gcgtcggagt acacagactt cagggggcct	120
cctgcctggc acgttcgttc gtctcccgta tcgccgtaag accctgagac cccgagcctc	180
tgcaggagag acgcacaaag aagcctcctc cctgtggcct ggctc	225
<210> 549 <211> 266 <212> DNA <213> Homo sapiens	
<400> 549 gaatgtcatt ttattccaat gataagatac agattacaaa acttctagta taattacaca	60
taattacctt ttgttgtttt cctacaagaa atgcacaggt attttgaggt cttttgtatt	120
gcattattgg taaaacattg catagtatta gtttgtggct ctgttacaat gggtaatgac	180
aggaatgcat acagatgtct ctgctatgat aaaatgtgct cttgttgggt tacattaacc	240
ttccttcaaa agggatttct cagttg	266
<210> 550 <211> 332 <212> DNA <213> Homo sapiens	
<400> 550 ttttaatcag aaatatctgc gcacattgac aaatgtccac cggatgggaa gaagaatgtg	60
gggtgtaaaa ttcccatttt tgagacccac ttgcttagaa tgtattaaag acctataatt	120
gaaaatacct tggcaaaatc tcccaaaatt gtctctcaaa ataacagtat atacagtgta	180
acatacacaa catcctgtta tactaatgaa aaaatctaag aaaaactcta taggatgata	240
tttagatatt acagtcacta tattaactat taggataatg tgccactaat tcccaatcgt	300
cactgctttc atgtagtgct tgctccatat tg	332
<210> 551 <211> 433 <212> DNA <213> Homo sapiens	
<400> 551 ttttaatatc tgctactgac tttggctttc tgaagtttgc tatctggctt accagtagaa	60
accettagte aattitggaa tigtacaatt teaatigtae aattetiegt tacaetetea	120
aatccacaag tcatttgtgc tgaagtagaa ttggaaaaat gagaagcata tttctgcatc	180
tgagttctgc tctacctgca actccctaca tgacctaagt aaccaatttt ctcatctatg	240
aaacaagaca aacctgctgc aagggctttc tgttacccct atgggagtgg tgggtaatgc	300
tgacgcccta tctgacactc tcatcactga aggtgtgtca tctgcatcct tctccagcct	360

tctctagctt ggcccattca gatgtcaatc tggtacaaga tctggctctt ctagttttct taagaattga tgc	420 433
<210> 552 <211> 258 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 552 gatectggge teataggeag tecettteae tteettgtet tgeteetge tatgetggag atgaatgtga etaaaaggge catettgetg gettaatgtg tggetggaga gaceageetg gagacaatgt ggeaaaatgg ggegetteat ceagtetgte taageeetgt egaettgggg aggtgattte ttteetggtt etatatgtna ageaaaataa atgtttaaa attaaaagea nnaaageaga atgtgagt</pre>	60 120 180 240 258
<210> 553 <211> 322 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 553 aattnnaaan acatggctgc atttattgtt cccagcccgg cgagaaggtt ttcccagaaa ggttccttgg gtcacctgcc cacccagcct tggtctgggc tgccatgtcc ccacgggcag gagagaggca caagtcacag tcaggcaagg gagcctcagc ttcctgggcg gtggctnttg gggtccctcc agtnttcacc tgggaccctc ggccaggttg ggacanattc cagggaggcg aggttgcatg gtccagcggt gggtgcaggt ggcaacaggt tcggcgggtt ttgcaggttc caaaaggagn tttcgggttg gg</pre>	60 120 180 240 300 322
<210> 554 <211> 503 <212> DNA <213> Homo sapiens <220>	
<220> <221> misc feature <223> n=a,t,g or c	
ttttttttt ttggtatcag tctctttatt ggatgtgagg gccaaaaggg actgtaactc ctgtctcagg aatggggata gatgggaggt tcttgaagcc ccaggcatan tggnnacctc tggctacagc ttgctctctg agacctgggg cttcactcgg atcacgcct cctggnanca ggtcacagct aggactccat cctgacgcca cagccgccca tggaccagcc cccgagagcc accggcccag gggctctcgc attcatagag catccagtgg tcagctcgga aggggggtg gaaccacatg gaaatggtcc agtgagacca tgaagtgcac cttgtctgnc cactggtgag	60 120 180 240 300 360
gcagcagtgc agtgcccaag aaggcatagt tcggagatat aggcggccac gagncagttg catttttcat gttcgncttc gnttgcaaca ggtccccttc agcctgggtt cctggggttt ncagttcagg accattttag ccn	420 480 503
<210> 555 <211> 419 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 555 ngagccagaa aaggatttt tttaattcaa gtaactgaaa taggaaacca gagggggagc cccaggctgg gataaatcat ggctacccct ccccaacaga acagggggag gaggtggccc	60 120

<210> 559

```
ctacacccat tatggtcgat tcgggccccc ttgctcactc tgctgcagca tcctagaggc
                                                                       180
agggccccac cttccctggg actggggtag tcggtcaccc agcctgcatt gccccagccc
                                                                       240
ctnttcccca caaagagtat cttgggggag ggnttcgtgg ggcagaacag gagggcaatg
                                                                       300
                                                                       360
agggatgaac attgctcaaa ctcctttcaa aggggcacct gaccgcacag gggaggntgg
                                                                       419
gcaggaaggg caagggntgg gggatgccgt ntaaggaggg cggangcagg canttttgg
       556
420
DNA
Homo sapiens
<400> 556 acaaatttatt actattttga aacaaatcac aaaataacat tcagaaactc
                                                                        60
aacatttcta aataacttaa ttcacaataa gtttagtcat aaagtcatgc tacaaaactc
                                                                       120
ctgtgtataa aagattatta ccaaggtatt catagatgtt aaaatgttct tcagaatgga
                                                                       180
gttggttcta gaagccaaag attctggaat gatgcttgta atcatgactg ccagcctggg
                                                                       240
agaggagetg getatgegea tgtgetetta getteeaact caccagtett ttgatgggag
                                                                       300
tgatccetee aggeagtage aceteagagg caggtaceet actgatteae agaggeaaag
                                                                       360
aqcctcccac ccatataatg ttagacaact ctacattcat ttaaaatcta gaggtgggaa
                                                                       420
       557
560
       ĎŇĂ
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 557 agtttcaatt tttattatga atgtccaaag tgacagcata ctgtgaaaat gctaagttct
                                                                        60
cattgattaa atttcaagag accacagact acagcattcc aagcacttta atttttgaca
                                                                       120
gagccaaaaa caaataaaag aatgataaaa atattetttt gggtgtaaag agtatteata
                                                                       180
                                                                       240
tttqaqtttt tqtatttttt tcttccctgc aggtattgtg aacactgata atttccaaaa
cataaattet qgtctggata ettgcagcaa atttttataa tetetacetg gataagaage
                                                                       300
                                                                       360
taataagaaa tgtacttata aagtatgttt accgatacag tgtgatatgt ttgtttatct
tcatttcccc tatctatccc atgaggettc ttgtctacca cccgggtacc tggctggttg
                                                                       420
                                                                       480
ggtaataaca ggacagggag gctgaagtga aacactccga agactggtac agaatccngg
gattttccgg aaagcnggca tttacnccct ttttttttaa tggaaagcct taagaccttc
                                                                       540
                                                                       560
agtggnttgg ggaacggtcc
       558
435
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<\!400\!> 558 ttttacatga gatattcaac attttattat aaaacaggct ttctgttaga tgattttgct
                                                                        60
120
                                                                       180
gttaggggta ttaagtgcat tttcaaatta ccatattttc aacttacaat agtttcaacg
                                                                       240
ggaggtaacc ccatcgtaag tggaggaaca tctagtgcct ggcacacgag ccggttctca
ataaatataa ctcttctcca tcttcttcaa acctcaggcc aggtttcagt gacctcctct
                                                                       300
cactttctaa gattattttt gcttgctggt gggtttactg tcatttttaa ccacatctaa
                                                                       360
                                                                       420
cctaccttaa aaaagtgtat ggatgggggt gccaggtaca aagacttagc ataangaaaa
cgaccattta ctttg
                                                                       435
```

<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;4400&gt; 559 catgctggag tgcagtggtg tgatctcggc tcactgcaac ctctaactcc tgggctcaag tgatctttcc aaccacagcc tctcaaagta gttggaacca tagacatgca acaccatgat tggctaattt ttttgtagac acggtagttt ttgtagacac agggtttcac catgttgccc aggctggtct caaactcctg ggacttaagc agatccattc gccttggact cccaaagtgc cgggactaca ggtgtgagct accacgcca gacgcatttt ctaaattctt gtgtatctat aataattcaa cttaattaaa actgttttgc actatggata cacaaaaggg agggcccaac aggtggattt ccct &lt;210&gt; 560 &lt;211&gt; 337 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	60 120 180 240 300 360 374
<2213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 560 tacanaaata tcctggcagg atctgaaact gtttctccaa atgtctaaaa tatatctgtc acacaaaatg acccccaaag agaatcctgg gaagaaaaca atttctcctc ctccatcatc caattaagta tttattaaac agtcactata cttaaaatac ctttccaggg taccacctac taaggttaac agactactgt tcaaacaccg caaaggaaag gcatggaact aggataggaa acaaggaaaa accttcaatt tttttttgtt ggcctttttg tttgtttta catgagggaa aagggaaacc aaactgaggg gggnaaaaaa ataaggg</pre> <210> 561 <211> 417	60 120 180 240 300 337
<212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
ceaterizate etecectore to tecatice togggetera gordaatget cageagaa gagtitataa ataaataaat tacaaaageg gocaggagt gocetogeca geeeteeegg gontantoge teagtgetea gtgagtgaca getgeaggat eegetgtaag teeteeete eetgetgeee gogeegotee egeteeteet geteeegtga aggacaacte eaggggeeag gocgagtgg ettetteaa agetggggtg goaceggtgg getggggggt gteetngggg agggggatee toggggeee toggggateet toggggatea agettocag ettettetgg gonaagggee eentteeag ettoaaget nttteetea ataaacegtg gocett	60 120 180 240 300 360 417
<pre> &lt;210&gt; 562 &lt;211&gt; 295 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c </pre>	
ttttttttt tttttttt tttttttt ttttttttt tttt	60 120 180 240 295

```
<400> 563
tttaccaqtt ctcqatttta tttaggactc aaattaacac caaccaaaca tatcactaac
                                                                          60
tcacttattt tcacattttc aaaqttqqat tqtqctqcaa atccatacat ttgtqctcac
                                                                         120
tacacatttg gggtattaca ttcattgaga ggctccaaag catcagtcca ataaacattt
                                                                         180
ttccaqcccq ataaccatcc ttggtaagaa ctaagaggta aaatcattca cacaactatt
                                                                         240
ttttcccttc tatccttagc tcataagcat ttgaccaaat gccaatgttt ttgccagtt
                                                                         299
       564
404
DNA
Homo sapiens
<400> 564 tttctaattq aqcaacttta ttcacataat ttctacacca agaactcgag gttatctctg
                                                                          60
                                                                         120
atggaaccaa tttcactaat atttacttta agggcagaga agtcaaccaa gtcctcacag
tctcaagaat caaaaacaaa acaaaaatac aaacagagag caagtgggaa gataaataac
                                                                         180
actccqaaat aacctaqcta cacactttta gtttccaatt tttctagcat gaaatcactt
                                                                         240
                                                                         300
ttctcttcca tcctgtaaga cgtgttctct cctctcttt ctgagttggg ctgtgaagag
                                                                         360
ctgccctggg tctcccgggt ctgacgggtg ttgtccaccc catctgaggg cacccagggg
aattgccctg ggggtccgga gccctggggg tttctggata gcct
                                                                         404
       565
346
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
gggagaaata accagctatt gttccgcatt caaacagaaa ttcaggtgct tgcatctttc
                                                                          60
acqtattqtt caaaaatcac aaqcatctgt ggaaaaaaac taaggtatta cagacactac
                                                                         120
acggaggtca tgttcttaca ttcaagacac taaatacaaa ccgangcant gcaaaattgt
                                                                         180
atactttaat tttaaaaccc antttttgtt ctcaacttga aaagggnaac acttttttgt
                                                                         240
ttcacaaaca agctgggtcg ggttgggant tctttttggg aacagtaggt cccgcgctaa
                                                                         300
                                                                         346
acactgggtt cttgcctccc cacccccntt ctctaaaatn aaccca
       566
551
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 566
tgggggcccaa tggcgatgtt aataaataca taaaatttta aagatctgga tttccaaggc
                                                                          60
acaagagttt aacacaggcc aggctggttc tcacaggaat gactccacgt gtgccccagc
                                                                         120
atcccaggga ggggaggca acagggggag ggcggggagc cccanggacc tccactctcc
                                                                         180
                                                                         240
aaaggggttg caggccaggg ccnactactc atgttcctcc aggctggctc agaacagccc
                                                                         300
ctttgccttg gggaaggaag aagtgagaag cacctctatc acctggcagg agtttaggag
                                                                         360
acatecteca agacecegga ggtgteetgg gaceceetge caetteetga gagecagagg
                                                                         420
atcttaagac tnttacctgt ccctttggag gtagcatggc cggcagctga gcacagctca
                                                                         480
ggccctttac agcaccgtgg ggtgaagtgt gtcttcccca ctccagcacc aagccaaggg
nttggcaccc tgccctgggg naatttggcc tnggtggccc ttgtcatttc caaggccaag
                                                                         540
                                                                         551
ctatgaatgg a
       DÑĂ Homo sapiens
```

```
^{<\!400>} 567 agteccaget cagageegea acetgeacag ceatgeeegg geaagaacte aggaegetga
                                                                        60
                                                                       120
atggetetea gatgeteetg gtgttgetgg tgetetegtg getgeegeat gggggegeee
tgtctctggc cgaggcgagc cgcgcaagtt tcccgggacc ctcagagttg cacaccgaag
                                                                       180
                                                                       240
actccagatt ccgagagttg cggaaacgct acgaggacct gctaaccagg ctgcgggcca
                                                                       300
accagagetg ggaagatteg aacacegace tegteeegge eeetgeagte eggatactea
                                                                       360
cqccaqaaqt gcggctggga tccggcggcc acctgcacct gcgtatctct cgggccgccc
ttcccgaggg gctccccgag gcctcccgcc ttcaccgggc tctgttccgg ctgtccccga
                                                                       420
                                                                       480
eggegteaag gtegtgggae gtgacaegae etetgeggeg teageteage ettgeaagae
cccaggegee egegetgeae etgegaetgt egeegeegee gtegeagteg gaccaactge
                                                                       540
                                                                       600
tggcagaatc ttcgtccgca cggccccagc tggagttgca cttgcggccg caagccgcca
                                                                       660
ggggggcgcg cagagcgcgt gcgcgcaacg gggaccactg tccgctcggg cccgggcgtt
                                                                       720
gctgccgtct gcacacggtc cgcgcgtcgc tggaagacct gggctgggcc gattgggtgc
tgtcgccacg ggaggtgcaa gtgaccatgt gcatcggcgc gtgcccgagc cagttccggg
                                                                       780
cggcaaacat gcacgcgcag atcaagacga gcctgcaccg cctgaagccc gacacggtgc
                                                                       840
                                                                       900
cagegeettg etgegtgeee geeagetaca ateceatggt geteatteaa aagaeegaea
                                                                       960
ccggggtgtc gctccagacc tatgatgact tgttagccaa agactgccac tgcatatgag
                                                                      1020
cagtectggt cettecactg tgcacetgeg egggggagge gaceteagtt gteetgeeet
                                                                      1080
gtggaatggg ctcaaggttc ctgagacacc cgattcctgc ccaaacagct gtatttatat
aagtotgtta tttattatta atttattggg gtgacottot tggggactog ggggotggto
                                                                      1140
                                                                      1200
tgatggaact gtgtatttat ttaaaactct ggtgataaaa ataaagctgt ctgaactgtt
                                                                      1201
       568
3323
DNA
Homo sapiens
<400> 568
tagtggtggg taagaaaatt ggaagtattc cctcctcatt tggtgggttg gtggctggga
                                                                        60
atatetgtte cettggaaat gtttgatget actetgaaag ategagaaet gagettteag
                                                                       120
                                                                       180
teggetecaa ggtaetaeca tgtttetgea ttggetagtg ggaatggtat atgtetteta
                                                                       240
ctttgcctcc ttcattctac tactgagaga ggtacttcga cctggtgtcc tgtggtttct
                                                                       300
aaggaatttg aatgatccag atttcaatcc agtacaggaa atgatccatt tgccaatata
taggcatctc cgaagattta ttttgtcagt gattgtcttt ggctccattg tcctcctgat
                                                                       360
                                                                       420
gctttggctt cctatacgta taattaagag tgtgctgcct aattttcttc catacaatgt
                                                                       480
catgctctac agtgatgctc cagtgagtga actgtccctc gagctgcttc tgcttcaggt
tgtcttgcca gcattactcg aacagggaca cacgaagcag tggctgaagg ggctggtgcg
                                                                       540
                                                                       600
agcgtggact gtgaccgccg gatacttgct ggatcttcat tcttatttat tgggagacca
                                                                       660
ggaagaaaat gaaaacagtg caaatcaaca agttaacaat aatcagcatg ctcgaaataa
                                                                       720
caacgctatt cctgtggtgg gagaaggcct tcatgcagcc caccaagcca tactccagca
gggagggcct gttggttttc agctttaccg ccgaccttta aattttccac tcaggatatt
                                                                       780
                                                                       840
tetgttgatt gtetteatgt gtataacatt actgattgee ageeteatet geettaettt
                                                                       900
accagtattt gctggccgtt ggttaatgtc gttttggacg gggactgcca aaatccatga
gctctacaca gctgcttgtg gtctctatgt ttgctggcta accataaggg ctgtgacggt
                                                                       960
gatggtggca tggatgcctc agggacgcag agtgatcttc cagaaggtta aagagtggtc
                                                                      1020
teteatgate atgaagaett tgatagttge ggtgetgttg getggagttg teeeteet
                                                                      1080
                                                                      1140
tctqqqqctc ctqtttqaqc tgqtcattqt qgctcccctq agggttccct tggatcagac
                                                                      1200
tectetttt tatecatgge aggaetggge aettggagte etgeatgeea aaateattge
agctataaca ttgatgggtc ctcagtggtg gttgaaaact gtaattgaac aggtttacgc
                                                                      1260
                                                                      1320
aaatggcatc cggaacattg accttcacta tattgttcgt aaactggcag ctcccgtgat
                                                                      1380
ctctgtgctg ttgctttccc tgtgtgtacc ttatgtcata gcttctggtg ttgttccttt
```

```
actaggtgtt actgcggaaa tgcaaaactt agtccatcgg cggatttatc catttttact
                                                                     1440
gatggtcgtg gtattgatgg caattttgtc cttccaagtc cgccagttta agcgccttta
                                                                     1500
tgaacatatt aaaaatgaca agtaccttgt gggtcaacga ctcgtgaact acgaacggaa
                                                                     1560
                                                                     1620
atctggcaaa caaggctcat ctccaccacc tccacagtca tcccaagaat aaagtagttg
tctcaacaac ttgaccttcc cctttacatg tccttttttg tggacttctc tctttggaga
                                                                     1680
                                                                     1740
tttttcccaq tgatctctca gcgttgtttt taagttaaat gtatttgact tgtgttctca
gcattcagag agcagcggtg taagattctg ctgttctccc tggatcttct gacattactg
                                                                     1800
                                                                     1860
ctgtctgaga tttgtatatg tgtaaataca agttccttga taccctaaaa ccttggatta
                                                                     1920
aacagaatgt gcattgtaca tctttaaaca aaatgtatat taatttatta aatctagttg
tcactttatt ttggacctgc tgtgatctcg acaggaaacg tgccacagag cagtagtgcg
                                                                     1980
caggcaagac ttttcagtga cgccttgtgg aacgcagttc atgatgtcct agcagctctc
                                                                      2040
                                                                      2100
actaagggaa ctgtacattc tttctttctt ggctattcag accttaccaa gaacgttaaa
                                                                      2160
ggaaacaagt agaaatcagc agtggagtgt ctgtggtaag aaaacatgaa ctttatgctt
cactgttagt tgtttgtgga agttattttg tataacacca aagctgttgt acatttccta
                                                                      2220
                                                                      2280
ctgcctgatt tttttcatgt gtctgtgttt gtaatattgt atagtatctt gtgctaggtg
aggaaattat tttttaattt tgataattta atattcctag tgtgatcagc attgggagtt
                                                                      2340
                                                                      2400
gggtttcagt ggggcatgtc tatacttaga gaaaaaaagt cccaatgaag attttcatga
gtcagcccc ccgcccgccc ccaccccaca cccacatcct ctcttttcca cacacaacta
                                                                      2460
                                                                      2520
tctgtttatt ttttgtagca gtggccgaaa gtcctgcaag gtcataaatc tttcagagtg
                                                                      2580
acatcaccaa ctgtactgca tcttactgga ttttaggactt ctgagatgct tgtgaagtat
                                                                      2640
agatgtggtt gtggtcttag attgacagca ttagagaaga ctggttagaa catctggtct
                                                                      2700
cgctggttag tgcctcgttg gctgaggact aggtgtgcat ttctcctagc ttttcatcag
                                                                      2760
gaaatcccaa agtttccaaa gctttttgtt tacagaataa aacttcaaat aaaaccaatt
cattatttgt ccagaaggaa gcttggctga gctggccttt taacatagga atgtatttcg
                                                                      2820
                                                                      2880
ttggaaacat tctgaaaaat ctcagagaac tgaaccctta caaactttgt tttccctcat
                                                                      2940
aaccaaagct tcaggttaga agtttagaaa aatagaatgg ttgggtacat gatctaaatg
tttaatgcta aaggtatatc gtaagggtag tgtttgtttt tgaacgataa tttagaagtt
                                                                      3000
                                                                      3060
ctcatagaaa gcgtataaca taggtcttca gaaactataa aagaattttc atatagtatt
                                                                      3120
aaaatccata gactaaaatc tgagaatttt ttaacatatg caagtcagcc aaacataagc
                                                                      3180
taccaaaata aagagcaatg tgttctggct gttttatact tcaacaattt tttccctaag
                                                                      3240
tgqtaaqcaa ttactttaaa acatattttt aaaaacatcg gtatcgggag ctgcggtggc
                                                                      3300
tccggccggt tgtcctggca cacaaggagg cgaggctatg cgttcgaggc caacctaggc
                                                                      3323
aaaattggaa aaaaaaaaaa aaa
       569
4792
DNA
Homo sapiens
<400> 569 ggaccacca gtaccgatcc cttcacgacc gtcaccatgg aagtgtcacc attgcagcct
                                                                        60
gtaaatgaaa atatgcaagt caacaaaata aagaaaaatg aagatgctaa gaaaagactg
                                                                       120
tctgttgaaa gaatctatca aaagaaaaca caattggaac atattttgct ccgcccagac
                                                                       180
                                                                       240
acctacattg gttctgtgga attagtgacc cagcaaatgt gggtttacga tgaagatgtt
                                                                       300
ggcattaact atagggaagt cacttttgtt cctggtttgt acaaaatctt tgatgagatt
ctagttaatg ctgcggacaa caaacaaagg gacccaaaaa tgtcttgtat tagagtcaca
                                                                       360
                                                                       420
attgatccgg aaaacaattt aattagtata tggaataatg gaaaaggtat tcctgttgtt
                                                                       480
gaacacaaag ttgaaaagat gtatgtccca gctctcatat ttggacagct cctaacttct
                                                                       540
aqtaactatg atgatgatga aaagaaagtg acaggtggtc gaaatggcta tggagccaaa
                                                                       600
ttgtgtaaca tattcagtac caaatttact gtggaaacag ccagtagaga atacaagaaa
                                                                       660
atgttcaaac agacatggat ggataatatg ggaagagctg gtgagatgga actcaagccc
```

ttcaatggag	aagattatac	atgtatcacc	tttcagcctg	atttgtctaa	gtttaaaatg	720
caaagcctgg	acaaagatat	tgttgcacta	atggtcagaa	gagcatatga	tattgctgga	780
tccaccaaag	atgtcaaagt	ctttcttaat	ggaaataaac	tgccagtaaa	aggatttcgt	840
agttatgtgg	acatgtattt	gaaggacaag	ttggatgaaa	ctggtaactc	cttgaaagta	900
atacatgaac	aagtaaacca	caggtgggaa	gtgtgtttaa	ctatgagtga	aaaaggcttt	960
cagcaaatta	gctttgtcaa	cagcattgct	acatccaagg	gtggcagaca	tgttgattat	1020
gtagctgatc	agattgtgac	taaacttgtt	gatgttgtga	agaagaagaa	caagggtggt	1080
gttgcagtaa	aagcacatca	ggtgaaaaat	cacatgtgga	tttttgtaaa	tgccttaatt	1140
gaaaacccaa	cctttgactc	tcagacaaaa	gaaaacatga	ctttacaacc	caagagcttt	1200
ggatcaacat	gccaattgag	tgaaaaattt	atcaaagctg	ccattggctg	tggtattgta	1260
gaaagcatac	taaactgggt	gaagtttaag	gcccaagtcc	agttaaacaa	gaagtgttca	1320
gctgtaaaac	ataatagaat	caagggaatt	cccaaactcg	atgatgccaa	tgatgcaggg	1380
ggccgaaact	ccactgagtg	tacgcttatc	ctgactgagg	gagattcagc	caaaactttg	1440
gctgtttcag	gccttggtgt	ggttgggaga	gacaaatatg	gggttttccc	tcttagagga	1500
aaaatactca	atgttcgaga	agcttctcat	aagcagatca	tggaaaatgc	tgagattaac	1560
aatatcatca	agattgtggg	tcttcagtac	aagaaaaact	atgaagatga	agattcattg	1620
aagacgcttc	gttatgggaa	gataatgatt	atgacagatc	aggaccaaga	tggttcccac	1680
atcaaaggct	tgctgattaa	ttttatccat	cacaactggc	cctctcttct	gcgacatcgt	1740
tttctggagg	aatttatcac	tcccattgta	aaggtatcta	aaaacaagca	agaaatggca	1800
	ttcctgaatt					1860
	attacaaagg					1920
gcagatatga	aaagacatcg	tatccagttc	aaatattctg	gtcctgaaga	tgatgctgct	1980
atcagcctgg	cctttagcaa	aaaacagata	gatgatcgaa	aggaatggtt	aactaatttc	2040
atggaggata	gaagacaacg	aaagttactt	gggcttcctg	aggattactt	gtatggacaa	2100
	atctgacata					2160
	agagatctat					2220
	cttgcttcaa					2280
	ctgaaatgtc					2340
	ctcagaattt					2400
	ccaggctaca					2460
	ctttggctcg					2520
	acaaccagcg					2580
	gtgctgaagg					2640 2700
	ttgtaaataa					2760
	acaagaactt					2820
	aagtagctat					2880
	cccagacata					2940
-	ctctcataac					3000
	tgactgaaga aaactagtct					3060
	atgacacggt					3120
	taagaaaaga					3180
	ctcgctttat					3240
	aattaattaa					3300
	aagcccagca					3360
	ctgaaaagag					3420
	ccctttggta					3480
5 5 -	- 55	J	5 5 5	5 - 5	55 5	

```
aatgaaaaag aacaagagct ggacacatta aaaagaaaga gtccatcaga tttgtggaaa
                                                                     3540
                                                                     3600
gaagacttgg ctacatttat tgaagaattg gaggctgttg aagccaagga aaaacaagat
                                                                     3660
gaacaagtcg gacttcctgg gaaagggggg aaggccaagg ggaaaaaaac acaaatggct
                                                                     3720
gaagttttgc cttctccgcg tggtcaaaga gtcattccac gaataaccat agaaatgaaa
                                                                     3780
gcagaggcag aaaagaaaaa taaaaagaaa attaagaatg aaaatactga aggaagccct
caagaagatg gtgtggaact agaaggccta aaacaaagat tagaaaagaa acagaaaaga
                                                                      3840
                                                                      3900
gaaccaggta caaagacaaa gaaacaaact acattggcat ttaagccaat caaaaaagga
aagaagagaa atccctggcc tgattcagaa tcagatagga gcagtgacga aagtaatttt
                                                                      3960
gatgtccctc cacgagaaac agagccacgg agagcagcaa caaaaacaaa attcacaatg
                                                                      4020
gatttggatt cagatgaaga tttctcagat tttgatgaaa aaactgatga tgaagatttt
                                                                      4080
                                                                      4140
qtcccatcag atgctagtcc acctaagacc aaaacttccc caaaacttag taacaaagaa
                                                                      4200
ctgaaaccac agaaaagtgt cgtgtcagac cttgaagctg atgatgttaa gggcagtgta
                                                                      4260
ccactgtctt caagccctcc tgctacacat ttcccagatg aaactgaaat tacaaaccca
                                                                      4320
gttcctaaaa agaatgtgac agtgaagaag acagcagcaa aaagtcagtc ttccacctcc
                                                                      4380
actaccggtg ccaaaaaaag ggctgcccca aaaggaacta aaagggatcc agctttgaat
                                                                      4440
tctggtgtct ctcaaaagcc tgatcctgcc aaaaccaaga atcgccgcaa aaggaagcca
                                                                      4500
tccacttctg atgattctga ctctaatttt gagaaaattg tttcgaaagc agtcacaagc
aagaaatcca agggggagag tgatgacttc catatggact ttgactcagc tgtggctcct
                                                                      4560
                                                                      4620
cgggcaaaat ctgtacgggc aaagaaacct ataaagtacc tggaagagtc agatgaagat
                                                                      4680
gatctgtttt aaaatgtgag gcgattattt taagtaatta tcttaccaag cccaagactg
                                                                      4740
gttttaaagt tacctgaagc tcttaacttc ctcccctctg aatttagttt ggggaaggtg
tttttagtac aagacatcaa agtgaagtaa agcccaagtg ttctttagct tt
                                                                      4792
       570
2261
DNA
Homo sapiens
^{<\!400>} 570 ccgcggttcc ggctgctccg gcgaggcgac ccttgggtcg gcgctgcggg cgaggtgggc
                                                                        60
aggtaggtgg gcggacggcc gcggttctcc ggcaagcgca ggcggcggag tcccccacgg
                                                                       120
cqcccqaaqc gcccccgca ccccggcct ccagcgttga ggcgggggag tgaggagatg
                                                                       180
ccgacccaga gggacagcag caccatgtcc cacacggtcg caggcggcgg cagcggggac
                                                                       240
                                                                       300
cattcccacc aggtccgggt gaaagcctac taccgcgggg atatcatgat aacacatttt
                                                                       360
gaacetteca teteetttga gggeetttge aatgaggtte gagacatgtg ttettttgae
                                                                       420
aacgaacagc tetteaceat gaaatggata gatgaggaag gagaceegtg tacagtatea
tctcagttgg agttagaaga agcctttaga ctttatgagc taaacaagga ttctgaactc
                                                                       480
ttgattcatg tgttcccttg tgtaccagaa cgtcctggga tgccttgtcc aggagaagat
                                                                       540
                                                                       600
aaatccatct accgtagagg tgcacgccgc tggagaaagc tttattgtgc caatggccac
actttccaag ccaagcgttt caacaggcgt gctcactgtg ccatctgcac agaccgaata
                                                                       660
                                                                       720
tggggacttg gacgccaagg atataagtgc atcaactgca aactcttggt tcataagaag
tgccataaac tcgtcacaat tgaatgtggg cggcattctt tgccacagga accagtgatg
                                                                       780
                                                                       840
cccatggatc agtcatccat gcattctgac catgcacaga cagtaattcc atataatcct
                                                                       900
tcaagtcatg agagtttgga tcaagttggt gaagaaaaag aggcaatgaa caccagggaa
agtggcaaag cttcatccag tctaggtctt caggattttg atttgctccg ggtaatagga
                                                                       960
                                                                      1020
agaggaagtt atgccaaagt actgttggtt cgattaaaaa aaacagatcg tatttatgca
                                                                      1080
atgaaagttg tgaaaaaaga gcttgttaat gatgatgagg atattgattg ggtacagaca
gagaagcatg tgtttgagca ggcatccaat catcctttcc ttgttgggct gcattcttgc
                                                                      1140
                                                                      1200
tttcagacag aaagcagatt gttctttgtt atagagtatg taaatggagg agacctaatg
tttcatatgc agcgacaaag aaaacttcct gaagaacatg ccagatttta ctctgcagaa
                                                                      1260
atcagtctag cattaaatta tcttcatgag cgagggataa tttatagaga tttgaaactg
                                                                      1320
```

```
gacaatgtat tactggactc tgaaggccac attaaactca ctgactacgg catgtgtaag
                                                                      1380
gaaggattac ggccaggaga tacaaccagc actttctgtg gtactcctaa ttacattgct
                                                                      1440
cctqaaattt taagaggaga agattatggt ttcagtgttg actggtgggc tcttggagtg
                                                                      1500
                                                                      1560
ctcatgtttg agatgatggc aggaaggtct ccatttgata ttgttgggag ctccgataac
                                                                      1620
cctgaccaga acacagagga ttatctcttc caagttattt tggaaaaaca aattcgcata
ccacgttctc tgtctgtaaa agctgcaagt gttctgaaga gttttcttaa taaggaccct
                                                                      1680
                                                                      1740
aaggaacgat tgggttgtca tcctcaaaca ggatttgctg atattcaggg acacccgttc
ttccgaaatg ttgattggga tatgatggag caaaaacagg tggtacctcc ctttaaacca
                                                                      1800
                                                                      1860
aatatttctg gggaatttgg tttggacaac tttgattctc agtttactaa tgaacctgtc
cagctcactc cagatgacga tgacattgtg aggaagattg atcagtctga atttgaaggt
                                                                      1920
tttgagtata tcaatcctct tttgatgtct gcagaagaat gtgtctgatc ctcatttttc
                                                                      1980
aaccatgtat tctactcatg ttgccattta atgcatggat aaacttgctg caagcctgga
                                                                      2040
                                                                      2100
tacaattaac cattttatat ttgccaccta caaaaaaaca cccaatatct tctcttgtag
actatatgaa tcaattatta catctgtttt actatgaaaa aaaaattaat actactagct
                                                                      2160
                                                                      2220
tccaqacaat catqtcaaaa tttagttgaa ctggtttttc agtttttaaa aggcctacag
                                                                      2261
atgagtaatg aagttacctt ttttgtttaa aaaaaaaaa g
       571
634
DNA
Homo sapiens
<400> 571 cggctgagag gcagcgaact catctttgcc agtacaggag cttgtgccgt ggcccacagc
                                                                        60
                                                                       120
ccacagccca cagccatggg ctgggacctg acggtgaaga tgctggcggg caacgaattc
caggtgtccc tgagcagctc catgtcggtg tcagagctga aggcgcagat cacccagaag
                                                                       180
                                                                       240
attggcgtgc acgccttcca gcagcgtctg gctgtccacc cgagcggtgt ggcgctgcag
gacagggtcc cccttgccag ccagggcctg ggccctggca gcacggtcct gctggtggtg
                                                                       300
                                                                       360
gacaaatgcg acgaacctct gagcatcctg gtgaggaata acaagggccg cagcagcacc
                                                                       420
tacgaggtcc ggctgacgca gaccgtggcc cacctgaagc agcaagtgag cgggctggag
ggtgtgcagg acgacctgtt ctggctgacc ttcgagggga agcccctgga ggaccagctc
                                                                       480
ccgctggggg agtacggcct caagcccctg agcaccgtgt tcatgaatct gcgcctgcgg
                                                                       540
ggaggcggca cagagcctgg cgggcggagc taagggcctc caccagcatc cgagcaggat
                                                                       600
                                                                       634
caagggccgg aaataaaggc tgttgtaaga gaat
       572
2533
DNA
Homo sapiens
                                                                        60
ggagctcaag ctcctctaca aagaggtgga cagagaagac agcagagacc atgggacccc
ceteageece tecetgeaga tigeatgice cetggaagga ggicetgete acageeteae
                                                                       120
                                                                       180
ttctaacctt ctggaaccca cccaccactg ccaagctcac tattgaatcc acgccattca
                                                                       240
atgtcgcaga ggggaaggag gttcttctac tcgcccacaa cctgccccag aatcgtattg
gttacagctg gtacaaaggc gaaagagtgg atggcaacag tctaattgta ggatatgtaa
                                                                       300
taggaactca acaagctacc ccagggcccg catacagtgg tcgagagaca atatacccca
                                                                       360
                                                                       420
atgcatccct gctgatccag aacgtcaccc agaatgacac aggattctat accctacaag
                                                                       480
tcataaagtc agatcttgtg aatgaagaag caaccggaca gttccatgta tacccggagc
tgcccaagcc ctccatctcc agcaacaact ccaaccccgt ggaggacaag gatgctgtgg
                                                                       540
ccttcacctg tgaacctgag gttcagaaca caacctacct gtggtgggta aatggtcaga
                                                                       600
                                                                       660
gcctcccggt cagtcccagg ctgcagctgt ccaatggcaa catgaccctc actctactca
                                                                       720
gcgtcaaaag gaacgatgca ggatcctatg aatgtgaaat acagaaccca gcgagtgcca
                                                                       780
accgcagtga cccagtcacc ctgaatgtcc tctatggccc agatgtcccc accatttccc
                                                                       840
cctcaaaggc caattaccgt ccaggggaaa atctgaacct ctcctgccac gcagcctcta
```

```
acccacctgc acagtactct tggtttatca atgggacgtt ccagcaatcc acacaagagc
                                                                     900
tctttatccc caacatcact gtgaataata gcggatccta tatgtgccaa gcccataact
                                                                     960
cagccactgg cctcaatagg accacagtca cgatgatcac agtctctgga agtgctcctg
                                                                    1020
                                                                    1080
tecteteage tgtggeeace gteggeatea egattggagt getggeeagg gtggetetga
                                                                    1140
tatagcagcc ctggtgtatt ttcgatattt caggaagact ggcagattgg accagaccct
gaattettet ageteeteea ateceatttt ateceatgga accaetaaaa acaaggtetg
                                                                    1200
                                                                    1260
ctctgctcct gaagccctat atgctggaga tggacaactc aatgaaaatt taaagggaaa
acceteagge etgaggtgtg tgecaeteag agaetteace taactagaga eagteaaact
                                                                    1320
                                                                    1380
gcaaaccatg gtgagaaatt gacgacttca cactatggac agcttttccc aagatgtcaa
aacaagactc ctcatcatga taaggctctt accccctttt aatttgtcct tgcttatgcc
                                                                    1440
tgcctctttc gcttggcagg atgatgctgt cattagtatt tcacaagaag tagcttcaga
                                                                    1500
                                                                    1560
gggtaactta acagagtgtc agatctatct tgtcaatccc aacgttttac ataaaataag
agatecttta gtgcacccag tgactgacat tagcagcate tttaacacag ccgtgtgtte
                                                                    1620
aaatgtacag tggtcctttt cagagttgga cttctagact cacctgttct cactccctgt
                                                                    1680
                                                                    1740
tttaattcaa cccagccatg caatgccaaa taatagaatt gctccctacc agctgaacag
ggaggagtct gtgcagtttc tgacacttgt tgttgaacat ggctaaatac aatgggtatc
                                                                    1800
                                                                    1860
gctgagacta agttgtagaa attaacaaat gtgctgcttg gttaaaatgg ctacactcat
ctgactcatt ctttattcta ttttagttgg tttgtatctt gcctaaggtg cgtagtccaa
                                                                    1920
                                                                    1980
ctcttggtat taccctccta atagtcatac tagtagtcat actccctggt gtagtgtatt
                                                                    2040
ctctaaaagc tttaaatgtc tgcatgcagc cagccatcaa atagtgaatg gtctctcttt
ggctggaatt acaaaactca gagaaatgtg tcatcaggag aacatcataa cccatgaagg
                                                                    2100
                                                                    2160
ataaaagccc caaatggtgg taactgataa tagcactaat gctttaagat ttggtcacac
                                                                    2220
tctcacctag gtgagcgcat tgagccagtg gtgctaaatg ctacatactc caactgaaat
2280
acacaggaga ttccagtcta cttgagttag cataatacag aagtcccctc tactttaact
                                                                    2340
                                                                    2400
tttacaaaaa agtaacctga actaatctga tgttaaccaa tgtatttatt tctgtggttc
tgtttccttg ttccaatttg acaaaaccca ctgttcttgt attgtattgc ccagggggag
                                                                    2460
ctatcactgt acttgtagag tggtgctgct ttaattcata aatcacaaat aaaagccaat
                                                                    2520
tagctctata act
                                                                    2533
      573
2427
DNA
Homo sapiens
<400>573 ggggcggccg gcaaggggcg cgccgcagcg gggccagacc ccggaggccg gcgcggacaa
                                                                      60
                                                                     120
gcgagccacg gcgggcctct gcggcggcgg cggcggcgg cggcgccacc gggcatccgg
                                                                     180
geggegggea gggegeggag aacetgeegg ettgaagage eagggeeaae gagetgttee
                                                                     240
gaagegggea gttgccegag geggceggea gtaeteggeg geaategege teetggagee
                                                                     300
cgcaggaagt gaaattgcag atgatctaag tattatattc aatagagcag catgttacct
aaaagaagga aactgcagtg gctgcattca agattgtaac agggctctgg aacttcatcc
                                                                     360
attetetatg aaacetette tgaggeggge gatggeetat gaaactetag ageagtatgg
                                                                     420
gaaagcttat gtggattata aaacagtgtt gcagatagac tgtggactcc agctagcaaa
                                                                     480
                                                                     540
tgacagtgtt aacaggctat caagaatttt aatggagctg gatggaccaa attggcggga
gaagetgtea ettatteetg etgtgeetge ttetgtgeea etgeaagett ggeateegge
                                                                     600
                                                                     660
aaaagagatg atctcaaaac aagcaggaga ctccagcagc catcgccagc agggcatcac
                                                                     720
agatgaaaaa acatttaaag cccttaagga agaaggaaat caatgtgtaa atgacaaaaa
ctataaagac gccctcagta aatacagcga atgcttaaag attaacaata aggaatgtgc
                                                                     780
catatataca aacagagete tetgttaett gaagetgtge cagtttgaag aageaaagea
                                                                     840
                                                                     900
ggactgtgat caggcacttc agctagctga tgggaacgtg aaagccttct atagacgagc
```

```
tctggctcat aaaggactca agaattatca gaaaagctta attgatctca ataaagttat
                                                                      960
                                                                     1020
cctactagat ccaagtatta ttgaggcaaa gatggaactg gaagaggtaa ctagactcct
taatcttaag gataagacag caccattcaa caaagaaaag gagagaagga aaattgagat
                                                                     1080
                                                                     1140
tcaagaggtg aatgaaggca aggaggagcc tggaagacct gcaggggagg tctccacggg
atgccttgct tctgagaagg gaggcaaaag cagcaggtca ccagaagacc ctgagaaact
                                                                     1200
                                                                     1260
teegatagee aageetaata atgeetatga atttggteag attataaatg eteteagtae
caggaaggat aaagaagcct gtgcacatct tttagccatc actgcaccaa aagatttgcc
                                                                     1320
                                                                     1380
gatgttttta agtaacaaac ttgaagggga tacattcctt ctcctcattc agtctctgaa
aaataatctt attgaaaaag atccctcatt ggtgtatcag catcttttat acctgagtaa
                                                                     1440
                                                                     1500
agcagaaagg tttaagatga tgttgacact aattagcaag ggccaaaagg agctaattga
                                                                     1560
acagctgttt gaggaccttt cagacacacc aaacaaccat tttactttag aagatataca
                                                                     1620
ggccctaaaa aggcagtatg agctttaaat caagataatt gttagatttc ttccatgcat
                                                                     1680
gtatgtgttc caggaatgtt aatgagatgg tattgtaaaa gagttgcatg gataaaactt
ggcctagaaa agtttggtct gcactataaa acattttact tattttccta catagaacat
                                                                     1740
                                                                     1800
gtatattcta caatctgctt tttattagtt gtaaatattt tcttatgtac cagaaccaaa
                                                                     1860
taagtatatt tagaacttgt taaaaataca ttttaattta tgatatacat attattttaa
ttacttgtta aaattttgag ttaagttgca tttctttggg ctatgaagga gtcctcttaa
                                                                     1920
                                                                     1980
gtttgataga aatgaatttc ttgtaacatt cttttttaaa agtggaagtc attaacagtg
                                                                     2040
attattatat cacttatatc ctgctaagat acacataaat cccattttgt actagtacct
                                                                     2100
gtggattaca gtcagttaaa atgaaatgca acactgaagt ctataacatg aaatgattat
                                                                     2160
taaattgttt attaatttag agctataaga ggaacttatt ttttctaata cggaagcatt
gcctaataat taagaacaaa aattgccaaa aatttctacc actttttact agattttaaa
                                                                     2220
                                                                     2280
aagctacttt cttttatatt gcctatataa gcaaaaaacc aaccactgta ttaaagcaaa
                                                                     2340
ctaagcctgc atttatatct gaattattac ctccatattt taccaaacat ttgaatgtcc
cccttccccc ttttttgttt tctgctttta tgactgtatt tattccttta ctgtaaaaga
                                                                     2400
                                                                     2427
atatgaagaa ctcaaaaaaa aaaaaaa
       DNA
Homo sapiens
                                                                       60
gaattcaggg gacccatggg aaaatttcca aaacaaccag gctctcacct actgggaatg
tgtctattta ctcatggtca caatgtccac cgttggttat ggggatgttt atgcaaaaac
                                                                      120
                                                                      180
cacacttggg cgcctcttca tggtcttctt catcctcggg ggactggcca tgtttgccag
                                                                      240
ctacgtccct gaaatcatag agttaatagg aaaccgcaag aaatacgggg gctcctatag
tqcqqttaqt qgaaqaaagc acattgtggt ctgcggacac atcactctgg agagtgtttc
                                                                      300
caacttcctg aaggactttc tgcacaagga ccgggatgac gtcaatgtgg agatcgtttt
                                                                      360
tcttcacaac atctccccca acctggaget tgaagetetg ttcaaacgac attttactca
                                                                      420
ggtggaattt tatcagggtt ccgtcctcaa tccacatgat cttgcaagag tcaagataga
                                                                      480
gtcagcagat gcatgcctga tccttgccaa caagtactgc gctgacccgg atgcggagga
                                                                      540
                                                                      600
tgcctcgaat atcatgagag taatctccat aaagaactac catccgaaga taagaatcat
                                                                      660
cactcaaatg ctgcagtatc acaacaaggc ccatctgcta aacatcccga gctggaattg
                                                                      720
gaaagaaggt gatgacgcaa tetgeetege agagttgaag ttgggettea tageecagag
ctgcctggct caaggcctct ccaccatgct tgccaacctc ttctccatga ggtcattcat
                                                                      780
aaagattgag gaagacacat ggcagaaata ctacttggaa ggagtctcaa atgaaatgta
                                                                      840
                                                                      900
cacagaatat etetecagtg cettegtggg tetgteette eetactgttt gtgagetgtg
                                                                      960
ttttgtgaag ctcaagetee taatgatage cattgagtae aagtetgeea aeegagagag
                                                                     1020
ccgtatatta attaatcctg gaaaccatct taagatccaa gaaggtactt taggattttt
catcgcaagt gatgccaaag aagttaaaag ggcatttttt tactgcaagg cctgtcatga
                                                                     1080
```

```
1140
tgacatcaca gatcccaaaa gaataaaaaa atgtggctgc aaacggctca aggttgcagc
                                                                     1200
tagatcacgc tattccaaag atccatttga gttcaagaag gagactccca attctcggct
tgtgaccgag ccagttgaag atgagcagcc gtcaacacta tcaccaaaaa aaaagcaacg
                                                                     1260
                                                                     1320
gaatggaggc atgcggaact cacccaacac ctcgcctaag ctgatgaggc atgacccctt
                                                                     1380
gttaattcct ggcaatgatc agattgacaa catggactcc aatgtgaaga agtacgactc
                                                                     1440
tactgggatg tttcactggt gtgcacccaa ggagatagag aaagtcatcc tgactcgaag
                                                                     1500
tgaagetgee atgacegtee tgagtggeea tgtegtggte tgeatetttg gegaegteag
ctcagccctg atcggcctcc ggaacctggt gatgccgctc cgtgccagca actttcatta
                                                                     1560
                                                                     1620
ccatgagctc aagcacattg tgtttgtggg ctctattgag tacctcaagc gggaatggga
gacgetteat aaetteecca aagtgteeat attgeetggt aegecattaa gtegggetga
                                                                     1680
tttaagggct gtcaacatca acctctgtga catgtgcgtt atcctgtcag ccaatcagaa
                                                                     1740
                                                                     1800
taatattgat gatacttcgc tgcaggacaa ggaatgcatc ttggcgtcac tcaacatcaa
                                                                     1860
atctatgcag tttgatgaca gcatcggagt cttgcaggct aattcccaag ggttcacacc
                                                                     1920
tccaggaatg gatagatcct ctccagataa cagcccagtg cacgggatgt tacgtcaacc
                                                                     1980
atccatcaca actggggtca acatccccat catcactgaa ctagtgaacg atactaatgt
tcagtttttg gaccaagacg atgatgatga ccctgataca gaactgtacc tcacgcagcc
                                                                     2040
                                                                     2100
ctttgcctgt gggacagcat ttgccgtcag tgtcctggac tcactcatga gcgcgacgta
cttcaatgac aatatcctca ccctgatacg gaccctggtg accggaggag ccacgccgga
                                                                     2160
gctggaggct ctgattgctg aggaaaacgc ccttagaggt ggctacagca ccccgcagac
                                                                     2220
                                                                     2280
actggccaat agggaccgct gccgcgtggc ccagttagct ctgctcgatg ggccatttgc
                                                                     2340
qqacttaqqq qatqqtgqtt gttatggtga tctgttctgc aaagctctga aaacatataa
                                                                     2400
tatgetttgt tttggaattt accggetgag agatgeteae etcageaece ecagteagtg
                                                                     2460
cacaaagagg tatgtcatca ccaacccgcc ctatgagttt gagctcgtgc cgacggacct
gatcttctgc ttaatgcagt ttgaccacaa tgccggccag tcccgggcca gcctgtccca
                                                                     2520
                                                                     2580
ttecteceae tegtegeagt eetceageaa gaagagetee tetgtteaet eeateeeate
                                                                     2640
cacagcaaac cgacagaacc ggcccaagtc cagggagtcc cgggacaaac agaagtacgt
gcaggaagag cggctttgat atgtcttcct tcacttcccc cattgccacc ccccaatccc
                                                                     2700
                                                                     2760
agtaccccca tcggtctgtt cacatctctg tgttcatctt ggcaagacct actcaatcaa
                                                                     2820
gtgatgatgc cagttgataa acttccctgg aaaacattta cagctattcc atttggcaaa
                                                                     2880
cttgcttctc tgtcaatatt tcatcctcct ttaaaccagg agggttatta atggcaaaag
                                                                     2940
cattggtctt ctttatgctt gatcagtatg actcaaatta aaagtgttct gctgtgtata
tcaactcagt agcccacacc cagttatctg ggagctgatg gttcagtcac tgtattaccc
                                                                     3000
                                                                     3060
aaatetttee tgeeagetge ettteagaca tttgttaaat eecaaceaga gaeegggeag
                                                                     3090
atagagagaa gtaaatctga agtgcgtttt
       DNĂ
Homo sapiens
                                                                       60
ggggggggggf gccgttggga ccacggcggc cagagcggca ggatggcttc cggcttcaag
aageceageg etgeeteeae eggeeaaaag agaaaggtgg cacctaagee egageteaet
                                                                      120
gaggatcaga agcaagaagt tcgggaagca tttgacctct tcgacgtgga cggaagtggg
                                                                      180
                                                                      240
accatcgacg cgaaggagct gaaggtggcc atgagagcgc tgggcttcga acccaggaag
gaagagatga agaaaatgat ctccgaggtg gacagggaag gcacggggaa gatcagcttc
                                                                      300
                                                                      360
aatgacttcc tggccgtgat gacgcagaag atgtccgaga aggacaccaa agaagaaatc
                                                                      420
ctgaaggcct tcaggctctt tgatgacgat gagaccggga agatctcgtt caaaaacctg
aagegtgtgg ccaaegaget gggggagaac etcaeggatg aggagetgea ggagatgate
                                                                      480
                                                                      540
gacgaagctg atcgggatgg ggacggcgaa gtgaacgagg aggagttcct tcggatcatg
                                                                      600
```

aagaagacca gcctttactg aagtcggttc agaagctaaa gtgactctct gggttgcctg

```
cttccatttt gtgaaacctt agaggacagc ggctgcctgt cccttcttca ccccctcacc
                                                                      660
                                                                       720
cccataattt gtctagatct atttccatat ctctagttca ataatagaat ttgaaagatg
cttgtaatgt gagttttggg ttttaattct caagagccaa cctggagcac atgaggttaa
                                                                      780
acaaagggcc ctgaagtttg agtgcgccct ccatttgccc tgtgctgaac ttgctgttca
                                                                       840
                                                                       900
tctgttgatc tggaggcagg acagcttctg ggacacacaa aaatgtggtt ccctttgtca
                                                                       960
cttctttggt ggtcttaaat tatcttgctt catatatcat tccttaaatt ccagtcattg
ttccagcata atgagatgga atctgccagt agatttgcct agcctgtcca cttagctgaa
                                                                      1020
taccagtttg aaggaaaaca gggtggccac ttacaaactt acggagctca ggacagatat
                                                                      1080
tcttataaag aatagacttg cttgggtggt agtacgttgt gcaattttga ctattcactg
                                                                      1140
                                                                      1161
qctttatacc tgcaaatgcc c
      576
2040
DNA
Homo sapiens
<\!\!400\!\!> 576 tgctctaaag caaatgttat cactgagtca ttgccatctg cagaatcaga acctgttgaa
                                                                        60
attgaggtag agattgccga agccattgaa gtggaagatg aaggcatcga aacattagag
                                                                       120
gaagtggctt ctgccaagca gtccgtaaag tacatacaga gcacaggttc ctctgatgat
                                                                       180
                                                                       240
tctgctctag cactgttggc agatattacc agcaagtacc gtcaaggtga cagaaaaggg
cagattaaag aagatggctg tccatctgac cccacgagca aacaggtaga aggtattgaa
                                                                       300
attgtggaac ttcagctgtc acatgtgaag gacttgttcc attgtgagaa atgtaaccgt
                                                                       360
                                                                       420
tcatttaaat tgttttacca ttttaaggag cacatgaaat cacactccac tgagagtttc
aagtgtgaaa tatgcaataa acgatatett egagagageg catggaaaca geacetaaat
                                                                       480
tgttaccacc ttgaagaagg tggagtcagt aagaagcaaa gaactgggaa aaaaattcat
                                                                       540
                                                                       600
gtatgtcagt actgtgagaa acagtttgac cattttggac attttaaaaga acatcttcga
                                                                       660
aaacatacag gtgaaaaacc ttttgaatgt ccaaattgtc atgaacgatt tgctagaaat
                                                                       720
aqcactctqa aatqtcacct cactgcatgc caaactggag taggggcaaa aaaaggaagg
aagaagctct acgaatgcca ggtctgcaac agtgtgttta acagctggga ccagttcaaa
                                                                       780
                                                                       840
gatcacttgg taatacacac tggagataaa cccaaccatt gtactttatg tgatttgtgg
                                                                       900
tttatgcaag gaaatgaatt aaggaggcat ctcagtgatg ctcacaatat ttcagagcgt
                                                                       960
ctagtaacgg aagaagttct ttcagtagaa acacgtgtgc aaactgaacc tgtaacatca
atgactatta tagaacaagt tgggaaggtg catgtgctac cattgcttca ggttcaggtg
                                                                      1020
                                                                      1080
gattcagcac aagtgactgt ggaacaagtc catccagatc tgctccagga cagccaggtg
                                                                      1140
cacgattcac acatgagtga gcttccagag caggtccaag tgagttatct agaagtgggc
cgaattcaga ctgaagaagg tactgaagta catgtagagg agctgcatgt tgaacgggtc
                                                                      1200
                                                                      1260
aatcaaatgc cagtggaagt acaaactgaa cttctagaag cagatttgga ccacgtgacc
ccagaaatca tgaaccaaga ggagagagag tctagccaag cagatgctgc tgaggctgcc
                                                                      1320
                                                                      1380
agggaagatc acgaagatgc tgaggattta gagaccaagc caacagtgga ttctgaagca
gaaaaggcag agaatgagga cagaacagct ctgccagttt tagaatgaaa ttacacatga
                                                                      1440
                                                                      1500
atatattttt aaatttactt gttgggtttt tgaactgatt atgggcagtt tgactgtcct
                                                                      1560
taattaagcc taacagacaa gtggaccaaa gttaagctgt ttcctgttgt gctgaactgt
tgtccgttga aacacattga ttcccctccc cctacttatt gccacagagg agggatcttt
                                                                      1620
tccataactg aaggggagtt ttgagaagta tatttctgga aacttaaatg gattatattc
                                                                      1680
ttattatata gttgggtacg aatgtatcta ttttcattgt ggtaaaagtt cttccttttc
                                                                      1740
                                                                      1800
tettteecag gteatgttet teeteaaatt titteeatat tgtaaaatea aacttaaate
                                                                      1860
attagaatac aagtttatgt attctaatgc atgttagaaa attgaataat ataggaaaca
caaggctgca tgatgaaaag tgcattgtta ctgtgcagtt aaattttggc ttctggcttt
                                                                      1920
                                                                      1980
ctttagtttg aacaaacgtt cttgtctacc ccagtagtca cagatgccat ctttgcaaca
                                                                      2040
```

gaaagagtgg tggtggcaaa atttctagaa tgttctttag agcacactgg ggtaccggat

577 2635 DNA Homo sapiens <400> 577 gaattcggca cgaggggtgc tattgtgagg cggttgtaga agagtttcgt gagtgctcgc 60 ageteatace tgtggetgtg tateegtgge caeagetggt tggegtegee ttgaaateee 120 aggccgtgag gagttagcga gccctgctca cactcggcgc tctggttttc ggtgggtgtg 180 ccctgcacct gcctcttccc ccattctcat taataaaggt atccatggag aacactgaaa 240 300 actcagtgga ttcaaaatcc attaaaaatt tggaaccaaa gatcatacat ggaagcgaat caatggactc tggaatatcc ctggacaaca gttataaaat ggattatcct gagatgggtt 360 tatqtataat aattaataat aagaattttc ataaaagcac tggaatgaca tctcggtctg 420 gtacagatgt cgatgcagca aacctcaggg aaacattcag aaacttgaaa tatgaagtca 480 ggaataaaaa tgatcttaca cgtgaagaaa ttgtggaatt gatgcgtgat gtttctaaag 540 aagatcacag caaaaggagc agttttgttt gtgtgcttct gagccatggt gaagaaggaa 600 660 taatttttgg aacaaatgga cctgttgacc tgaaaaaaat aacaaacttt ttcagagggg 720 atcqttgtag aagtctaact ggaaaaccca aacttttcat tattcaggcc tgccgtggta 780 cagaactgga ctgtggcatt gagacagaca gtggtgttga tgatgacatg gcgtgtcata aaataccaqt gqatqccgac ttcttgtatg catactccac agcacctggt tattattctt 840 ggcgaaattc aaaggatggc tcctggttca tccagtcgct ttgtgccatg ctgaaacagt 900 960 atgccgacaa gcttgaattt atgcacattc ttacccgggt taaccgaaag gtggcaacag 1020 aatttgagtc cttttccttt gacgctactt ttcatgcaaa gaaacagatt ccatgtattg tttccatgct cacaaaagaa ctctattttt atcactaaag aaatggttgg ttggtggttt 1080 tttttagttt gtatgccaag tgagaagatg gtatatttgg tactgtattt ccctctcatt 1140 ttgacctact ctcatgctgc agagggtact ttaagacata ctccttccat caaatagaac 1200 cactatgaag ctacctcaaa cttccagtca ggtagttgca attgaattaa attaggaata 1260 1320 aataaaaatg gatactggtg cagtcattat gagaggcaat gattgttaat ttacagcttt 1380 catgattagc aagttacagt gatgctgtgc tatgaatttt caagtaattg tgaaaaagtt 1440 aaacattgaa gtaatgaatt tttatgatat tccccccact taagactgtg tattctagtt 1500 ttgtcaaact gtagaaatga tgatgtggaa gaacttaggc atctgtgggc atggtcaaag gctcaaacct ttattttaga attgatatac acggatgact taactgcatt ttagaccatt 1560 1620 tatctgggat tatggttttg tgatgtttgt cctgaacact tttgttgtaa aaaaataata 1680 ataataatgt ttaatattga gaaagaaact aatattttat gtgagagaaa gtgtgagcaa 1740 actaacttga cttttaaggc taaaacttaa cattcataga ggggtggagt tttaactgta aggtgctaca atgcccctgg atctaccagc ataaatatct tctgatttgt ccctatgcat 1800 1860 atcagttgag cttcatatac cagcaatata tctgaagagc tattatataa aaaccccaaa 1920 ctgttgatta ttagccaggt aatgtgaata aattctatag gaacatatga aaatacaact 1980 taaataataa acagtggaat ataaggaaag caataaatga atgggctgag ctgcctgtaa cttgagagta gatggtttga gcctgagcag agacatgact cagcctgttc catgaaggca 2040 gagccatgga ccacgcagga agggcctaca gcccatttct ccatacgcac tggtatgtgt 2100 2160 ggatgatgct gccagggcgc catcgccaag taagaaagtg aagcaaatca gaaacttgtg aagtggaaat gttctaaagg tggtgaggca ataaaaatca tagtactctt tgtagcaaaa 2220 2280 ttcttaagta tgttattttc tgttgaagtt tacaatcaaa ggaaaatagt aatgttttat actgtttact gaaagaaaaa gacctatgag cacataggac tctagacggc atccagccgg 2340 2400 aggccagage tgagcactca gecegggagg caggetecag geeteageag gtgeggagee gtcactgcac caagtctcac tggctgtcag tatgacattt cacgggagat ttcttgttgc 2460 2520 tcaaaaaatg agctcgcatt tgtcaatgac agtttctttt ttcttactag acctgtaact 2580 tttgtaaata cacacagcat gtaatggtat cttaaagtgt gtttctatgt gacaattttg 2635 tacaaatttg ttattttcca tttttatttc aaaatataca ttcaaactta aaatt

<210> 578 <211> 1009	
<212> DNA <213> Homo sapiens	
<400> 578 tcagctcctc cagcttccgc cagcgaatgt tggggaacct gcttcggcct ccatatgaaa	60
ggccagagct ccccacatgt ctctatgtaa ttgggctgac tggcatcagt ggctctggga	120
agageteaat ageteagega etgaagggee tgggggggtt tgteattgae agtgaceaec	180
tgggtcatcg ggcctatgcc ccaggtggcc ctgcctacca gcctgtggtg gaggcctttg	240
	300
gaacagatat tetecataaa gatggcatca teaacaggaa ggteetagge ageegggtgt	360
ttgggaataa gaagcagctg aagatactca cggacattat gtggccaatt atcgcaaagc	420
tggcccgaga ggagatggat cgggctgtgg ctgagggaaa gcgtgtgtgt gtgattgatg	480
ccgctgtgtt gcttgaagcc ggctggcaga acctggtcca tgaggtgtgg actgctgtca	
tcccagagac tgaggctgta agacgcattg tggagaggga tggcctcagt gaagccgcgg	540
ctcaaagccg gctgcagagc cagatgagcg ggcagcagct tgtggaacag agccacgtgg	600
tgctcagcac ttgtgggagc cgcatatcac ccaacgccag gtggagaaag cctgggccct	660
cttgcagaag cgcattccca agactcatca ggccctcgac tgaaaggttc tcagtggggc	720
cagactggct cctggagctg acaagcgacc ccgtggtgag gagaaatggg ggccttgatg	780
ctcaccctgg ttcaggccca gaggtccaag ctatactgtg caggacatgg ccaggcctgg	840
tggacacagg aagcctaccc aacacgctgg tatttggcca acactgagga tgtggttcat	900
gggggagcag teceeteece actettgeee atgggtgaet ettaceeaca getgaetagg	960
gccagcgcaa atactggaac ctgtaacaga attaaaggtg aatgttctg	1009
<210> 579 <211> 1896 <212> DNA <213> Homo sapiens	
<400> 579 gcggcggtgg cggaggcgga cacattggcg tgagacctgg gagtacgttg tgccaaatca	<b>C</b> 0
	60
	120
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg	
	120
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa	120 180
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt	120 180 240
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaaggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaaggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaaggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 720 780 840 900
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960
ttgccacttg ccacatgagt gtaaatgatg gcggatgcaa gtatgtcctc tgccgatggg aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020
aaaaggatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgcttc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140
aaaaggatt atggcetgeg aaggtgacag ccattattet gtaactteag gacttagaaa tgactteeg gtgacaagta aaatettgat caggagatac ctaggatttg cttcagtgaa ataattgage cagaacacgg ttggcactga ttetegttee ccattaatg gggttttggt ctagtgette caaggttaca cttecagaaa tgtettttt ttttecacaet aaaaaaaaaa aaaagaatca getgtaaaaa ggcatgtaag getgtaacte aaggaaagat ctggcaagea geetgteaget gcaatgcaaa ageecaggte cttgtetttg tetecagaaa teaggaaaga eecetgtgat agtaaattat ggtegtgte agggaatget ttecageaat teagtagaca geetcaget gcaatgcaaa ageecaggte cttgtetttg tetgecactg geeteteatg ceecagtte caggattace tgetgcattt gtgetaaagt ttgecactg tetecatgt tataggeett caggattace tgetgcattt gtgetaaagt ttgecactgt tetecactgt cagetgttgt aataacaagg attttettt gttttaaatg taggttttgg ceegaacege gacttcaaca aaaaataaga gaagaaagga atattteta getgtgcaaa teeteteet agaggaaaag ttaattgttg tgttgttta atactgttt tteeegtgta gattteegt caccatttgt gtaatteet cacaateg gaagacaage caacacage ceactettaa tgggettatt ttatgteag tttggaaget gaagaccaa acagggaaat tteggaaget tattggaaget tttggaaget tattggaaget tttggaaget tattggaaget tttggaaget tattggaagaa teggaaaataa atgtaaatta tactcagggt ttettaatea gtggettaata tattggaaaaa tteggaaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140
aaaagcgatt atggcctgcg aaggtgacag ccattattct gtaacttcag gacttagaaa tgactttcgg gtgacaagta aaatcttgat caggagatac ctaggatttg cttcagtgaa ataattgagc cagaacacgg ttggcactga ttctcgttcc ccatttaatg gggttttggt ctagtgctc caaggttaca cttccagaaa tgtcttttt ttttcacact aaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140 1200 1260
aaaaggatt atggcetgeg aaggtgacag ccattattet gtaactteag gacttagaaa tgactteeg gtgacaagta aaatettgat caggagatac ctaggatttg cttcagtgaa ataattgage cagaacacgg ttggcactga ttetegttee ccattaatg gggttttggt ctagtgette caaggttaca cttecagaaa tgtettttt ttttecacaet aaaaaaaaaa aaaagaatca getgtaaaaa ggcatgtaag getgtaacte aaggaaagat ctggcaagea geetgteaget gcaatgcaaa ageecaggte cttgtetttg tetecagaaa teaggaaaga eecetgtgat agtaaattat ggtegtgte agggaatget ttecageaat teagtagaca geetcaget gcaatgcaaa ageecaggte cttgtetttg tetgecactg geeteteatg ceecagtte caggattace tgetgcattt gtgetaaagt ttgecactg tetecatgt tataggeett caggattace tgetgcattt gtgetaaagt ttgecactgt tetecactgt cagetgttgt aataacaagg attttettt gttttaaatg taggttttgg ceegaacege gacttcaaca aaaaataaga gaagaaagga atattteta getgtgcaaa teeteteet agaggaaaag ttaattgttg tgttgttta atactgttt tteeegtgta gattteegt caccatttgt gtaatteet cacaateg gaagacaage caacacage ceactettaa tgggettatt ttatgteag tttggaaget gaagaccaa acagggaaat tteggaaget tattggaaget tttggaaget tattggaaget tttggaaget tattggaaget tttggaaget tattggaagaa teggaaaataa atgtaaatta tactcagggt ttettaatea gtggettaata tattggaaaaa tteggaaaaaaaaaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140

```
1440
tgcgtgattg tggcgagggc gcgtctggca ccgggaaggt gtagatcatc tagaatgacg
gcgattccga cgccccggtc agtcctgcgt gattggcgag ggtgcatctg tcgtgagaat
                                                                     1500
                                                                     1560
teccagttet gaagagagea aggagaetga teccagegtag tecaaggeat tggeteeeet
gttgctcttc cttgtggagc tccccctgcc ccactccctc ctgcctgcat cttcagagct
                                                                     1620
                                                                      1680
gcctctgaag ctcgcttggt ccctagctca cactttccct gcggctggga aggtaattga
atactcgagt ttaaaaggaa agcacatcct tttaaaccaa aacacacctg ctgggctgta
                                                                      1740
aacagetttt agtgacatta ecatetaete tgaaaateta acaaaggagt gatttgtgca
                                                                     1800
                                                                      1860
gttgaaagta ggatttgctt cataaaagtc acaatttgaa ttcatttttg cttttaaatc
                                                                      1896
cagccaacct tttctgtctt aaaaggaaaa aaaaaa
      580
3172
DNA
Homo sapiens
<400> 580 gctgggttta gtaggagacc tggggcaagg ccccctgtgg acgaccatct gccagcttct
                                                                        60
ctcgttccgt cgattgggag gagcggtggc gacctcggcc ttcagtgttt ccgacggagt
                                                                       120
                                                                       180
gaatggcggc ggcggctggg atgctgctgc tgggcttgct gcaggcgggt gggtcggtgc
tgggccaggc gatggagaag gtgacaggcg gcaacctctt gtccatgctg ctgatcgcct
                                                                       240
gegeetteae eeteageetg gtetaeetga teegtetgge egeeggeeae etggteeage
                                                                       300
                                                                       360
tgcccgcagg ggtgaaaagt cctccataca ttttctcccc aattccattc cttgggcatg
                                                                       420
ccatagcatt tgggaaaagt ccaattgaat ttctagaaaa tgcatatgag aagtatggac
ctgtatttag ttttaccatg gtaggcaaga catttactta ccttctgggg agtgatgctg
                                                                       480
                                                                       540
ctgcactgct ttttaatagt aaaaatgaag acctgaatgc agaagatgtc tacagtcgcc
tgacaacacc tgtgtttggg aagggagttg catacgatgt gcctaatcca gttttcttgg
                                                                       600
                                                                       660
agcagaagaa aatgttaaaa agtggcctta acatagccca ctttaaacag catgtttcta
                                                                       720
taattgaaaa agaaacaaag gaatactttg agagttgggg agaaagtgga gaaaaaaatg
                                                                       780
tqtttqaaqc tctttctgag ctcataattt taacagctag ccattgtttg catggaaagg
                                                                       840
aaatcagaag tcaactcaat gaaaaggtag cacagctgta tgcagatttg gatggaggtt
                                                                       900
tcagccatgc agcctggctc ttaccaggtt ggctgccttt gcctagtttc agacgcaggg
                                                                       960
acagagetea tegggaaate aaggatattt tetataagge aateeagaaa egeagaeagt
ctcaagaaaa aattgatgac attctccaaa ctttactaga tgctacatac aaggatgggc
                                                                      1020
                                                                      1080
gtcctttgac tgatgatgaa gtagcaggga tgcttattgg attactcttg gcagggcagc
atacatecte aactactagt gettggatgg gettettttt ggecagagae aaaacaette
                                                                      1140
                                                                      1200
aaaaaaaatg ttatttagaa cagaaaacag tctgtggaga gaatctgcct cctttaactt
                                                                      1260
atgaccagct caaggatcta aatttacttg atcgctgtat aaaagaaaca ttaagactta
gacctcctat aatgatcatg atgagaatgg ccagaactcc tcagactgtg gcagggtata
                                                                      1320
                                                                      1380
ccattcctcc aggacatcag gtgtgtgttt ctcccactgt caatcaaaga cttaaagact
                                                                      1440
catgggtaga acgcctggac tttaatcctg atcgctactt acaggataac ccagcatcag
                                                                      1500
gggaaaagtt tgcctatgtg ccatttggag ctgggcgtca tcgttgtatt ggggaaaatt
                                                                      1560
ttgcctatgt tcaaattaag acaatttggt ccactatgct tcgtttatat gaatttgatc
tcattgatgg atactttccc actgtgaatt atacaactat gattcacacc cctgagaacc
                                                                      1620
cagttatccg ttacaaacga agatcaaaat gaaaaaggtt gcaaggaacg aatatatgtg
                                                                      1680
                                                                      1740
attatcactg taagccacaa aggcattcga agagaatgaa gtgtacaaaa caactcttgt
                                                                      1800
agtttactgt ttttttaagt gtgtaattct aaaagccagt ttatgattta ggattttgtt
                                                                      1860
aactgaatgg ttctatcaaa tataatagca tttgacacat tttctaatag ttatgatact
                                                                      1920
tatacatgtg ctttcaggaa gttccttggt gaaacaattg ttgagggggg atctaggtaa
ttggcagatt ctaaataata taatttccag atagtaattt taagagtact catcgctctt
                                                                      1980
gccaaataag ttcagggtat tcaaatcttg gactagtcct gcaaggtata aagaataaaa
                                                                      2040
atcccagtga gatacttgga aaccacagtt tattattatt tatctgggca attattgtgt
                                                                      2100
```

```
gtgtgaggat ggaagggtag ggaataatcg aacatctaaa gccttgaata agagaatact
                                                                     2160
aattgttttg gtatgatgat actcagaaat ggagatatta taggaaaaag aaatcctttg
                                                                     2220
                                                                     2280
gaattttaac taaaatcact gcatatggga aattaagaga tccaggacca tatttgataa
                                                                     2340
gagttcctaa aaataatgta attattaatg ctaaagactg ctcatgtatc ttgatctaat
                                                                     2400
tactaaataa attacatatt tatttacctg ataaatatgt atctagttct acaaggtcac
atttatgtgg aagtccaaag tcaagtcctt aggggataat tttgttttgg gctcagttgt
                                                                     2460
                                                                     2520
tccctgcttc ctttttttt ttttttttt ttttgagatgg agtctcgctc tgttgcccag
qctgqagtgc agtggtgcga tctcagctca ctgcatcctc tgcctcccgg gttcaagcaa
                                                                      2580
ttctctqcct cagcctccca agtagttggg attacaggca cctgccacca tgcctggcta
                                                                      2640
attttttgta tttttagtag agacgggggt ttcactatgt tggctaggct ggtcttgaac
                                                                     2700
                                                                      2760
tectgageet egtgagteea eeegeettgg eeteecaaag tgetgggatt acaggeatga
gccaccgcac ctggccttcc ctgcttcctc tctagaatcc aattagggat gtttgttact
                                                                      2820
                                                                      2880
actcatattg attaaaacag ttaacaaact tttttctttt taaaatgtga gatcagtgaa
                                                                      2940
ctctggtttt aagataatct gaaacaaggt ccttgggagt aataaaattg gtcacattct
gtaaagcaca ttctgtttag gaatcaactt atctcaaatt gtaactcggg gcctaactat
                                                                      3000
                                                                      3060
atgagatggc tgaaaaaata ccacatcgtc tgttttcact aggtgatgcc aaaatatttt
gctttatgta tattacagtt ctttttaaaa cactggaaga ctcatgttaa actctaattg
                                                                      3120
                                                                      3172
tgaaggcaga atctctgcta atttttcaga ttaaaattct ctttgaaaaa at
       581
2200
DNA
Homo sapiens
<400> 581 cgggattact gccaggcaca gcacgacctc tatgcagaca agtgaactgt agaaactgat
                                                                        60
tactgctcca ccaagaagcc cccataagag tggttatcct ggacacagaa gtgttgaatt
                                                                       120
                                                                       180
gaaatccaca gagcatttta caagagttct gacctggatg gggtaaacct cagtgcactt
                                                                       240
cttttctgtt ggcctcagta ttactggatt gaagaattgc tgcttcttgt taggaggttc
                                                                       300
atttcactta tcattactta caacttcata ctcaaagcac tgagaatttc aagtggagta
tattgaagta gacttcagtt tctttgcatc atttctgtat tcaatttttt taattatttc
                                                                       360
                                                                       420
ataaccctat tgagtgtttt taactaaata acatggctcg aatgaaccgc ccagctcctg
tggaagtcac atacaagaac atgagatttc ttattacaca caatccaacc aatgcgacct
                                                                       480
                                                                       540
taaacaaatt tataqaggaa cttaagaagt atggagttac cacaatagta agagtatgtg
aagcaactta tgacactact cttgtggaga aagaaggtat ccatgttctt gattggcctt
                                                                       600
                                                                       660
ttqatqatqq tqcaccacca tccaaccaga ttgttgatga ctggttaagt cttgtgaaaa
ttaagtttcg tgaagaacct ggttgttgta ttgctgttca ttgcgttgca ggccttggga
                                                                       720
gagetecagt aettgttgee etageattaa ttgaaggtgg aatgaaatae gaagatgeag
                                                                       780
                                                                       840
tacaattcat aagacaaaag cggcgtggag cttttaacag caagcaactt ctgtatttgg
agaagtatcg tcctaaaatg cggctgcgtt tcaaagattc caacggtcat agaaacaact
                                                                       900
                                                                       960
gttgcattca ataaaattgg ggtgcctaat gctactggaa gtggaacttg agatagggcc
taatttgtta tacatattag ccaacatgtt ggcttagtaa gtctaatgaa gcttccatag
                                                                      1020
                                                                      1080
gagtattgaa aggcagtttt accaggcctc aagctagaca gatttggcaa cctctgtatt
                                                                      1140
tgggttacag tcaacctatt tggatacttg gcaaaagatt cttgctgtca gcatataaaa
                                                                      1200
tgtgcttgtc atttgtatca attgaccttt ccccaaatca tgcagtattg agttatgact
                                                                      1260
tgttaaatct attcccatgc cagaatctta tcaatacata agaaatttag gaagattagg
                                                                      1320
tgccaaaata cccagcacaa tacttgtata tttttagtac catacagaag taaaatccca
                                                                      1380
ggaactatga acactagacc ttatgtggtt tattccttca atcatttcaa acattgaaag
tagggcctac atggttattt gcctgctcac tttatgttta catctcccac attcatacca
                                                                      1440
atatacgtca ggtttgctta accattgatt ttttttttt ttaccaagtc ttacagtgat
                                                                      1500
tattttacgt gtttccatgt atctcacttt gtgctgtatt aaaaaaacct ccattttgaa
                                                                      1560
```

```
aatctacgtt gtacagaagc acatgtcttt aatgtcttca gacaaaaaag ccttacatta
                                                                      1620
                                                                      1680
atttaatgtt tgcactctga ggtgcaactt aacagggagg gcctgagaaa agaatgggag
                                                                      1740
ggggctatta attatttttt agcaaaatgt tgcctttgtc ttgtgcaaac atgtagaata
                                                                      1800
tgctctttaa tctagtaaaa tatttttta aaaggtagag atgctttgtt attgtaatca
taaacttcct gaaattcttg taattttttc ccatacttat cagaagtgtg tttaccaact
                                                                      1860
                                                                      1920
tatttttgtt tgaaagtgtg atttttttt tccttcccaa cctctcttgc aaaaaaagaa
atgggtttct gctaatgaat tgagcagaga tctaatattt tatatgcctt ttgagctgtg
                                                                      1980
                                                                      2040
taagttaata tttgatactt gacaatttgt tttattatgt aattgataaa atggtgatgt
                                                                      2100
gtattaatgt tagttcaacc atatatttat actgtctggg gatgtgtggt tatagttctg
tgggagaaat aattttgtca gtgttcacca gcttgtaaaa acttagtgcg agagctgaaa
                                                                      2160
                                                                      2200
catctaaata aataatgaca tgcatttatc atcattgaaa
       DNA
Homo sapiens
^{<\!400>} 582 ccactaaagt gcaagaatta cattgcactg tttctccact ttttattttc tcttaggctt
                                                                        60
ttgtttctat ttcaaacata ctttcttggt tttctaatgg agtatatagt ttagtcattt
                                                                       120
cacaqactet qgeeteetet eetgaaatee ttttggatgg ggaaagggaa ggtggggagg
                                                                       180
                                                                       240
gtccgacagt ggcggtagag aggagactcc ggctggcgac cggggactgg tggagtgggg
                                                                       300
tgatagccaa gccatgggag acaagaagag ccccaccagg ccgaagcggc acgcgaagcc
ttcctcggat gagggttact gggactgtag cgtctgcacc ttccggaaca gcgccgaggc
                                                                       360
                                                                       420
cttcaagtgc atgatgtgcg atgtgcggaa gggcacctcc acccggaaac ctcgacctgt
ctcccagttg gttgcacagc aggttactca gcagtttgtg cctcctacac agtcaaagaa
                                                                       480
agagaaaaaa gataaagtag aaaaagaaaa aagtgaaaag gaaacaacta gcaaaaagaa
                                                                       540
                                                                       600
tagccataag aaaaccaggc caagattgaa aaatgtggat cggagtagtg ctcagcattt
                                                                       660
ggaagttact gttggagatc tgacagtcat tattacagac tttaaggaga aaacaaagtc
accgcctgca tctagtgctg cctctgcaga tcaacacagt caaagcggct ctagctctga
                                                                       720
taacacagag agaggaatgt ccaggtcatc ttcacccaga ggagaagcct catcattgaa
                                                                       780
                                                                       840
tggagaatet cattaaagtt tattttetee aatttettag teacttetgt cetaceatge
aaatacacag attatgccaa gaggtaccac attttcatga cagatacatt catgcacaat
                                                                       900
                                                                       960
ccataatttg agttttacat aaaatagaaa tttgttagaa tttgttagat tttattgcaa
tgatgcctac caaacatttc cagacttaac attttggtct ctgcagttaa gtgccatgaa
                                                                      1020
                                                                      1033
aatgtggttg aat
       583
2738
DNA
Homo sapiens
<400> 583 egeggaatte egegeegeeg eegeeggeag acceegeget eeggeteegg
                                                                        60
cteggetege teggeteegg tgegegeega ggeeatgeag egeeggggeg ceetgttegg
                                                                       120
catgccgggc ggcagcggag gcaggaagat ggctgcagga gacatcggcg agctgctagt
                                                                       180
                                                                       240
gccccacatg cccacgatcc gcgtgcccag gtccggcgac agggtctaca agaacgagtg
                                                                       300
egeettetee taegaetete eeaattetga aggtggaete tatgtatgea tgaatacatt
                                                                       360
tttggccttt ggaagggaac atgttgaaag acattttcga aaaactggac agagtgtata
catgcacctg aaaagacatg cgcgagagaa ggtaagaggg gcgtctggtg gagcgttacc
                                                                       420
aaaaaggagg aattccaaga tttttttaga tctagatact gatgacgatt taaatagcga
                                                                       480
                                                                       540
cgattatgaa tatgaagatg aagccaaact tgttatattc ccagatcact atgaaatagc
                                                                       600
actaccaaat attgaggagt taccagccct ggtaacaatt gcttgtgatg cagttctcag
ctcaaaatct ccatacagaa agcaggaccc agacacgtgg gaaaatgaat tgccagtatc
                                                                       660
```

taaatatgcc aacaacctca cccagctgga caatggagtc aggattcctc caagtggttg

720

```
780
gaagtgtgcc agatgcgacc tgcgagaaaa cctctggttg aatctgactg acggctctgt
cctgtgtgga aagtggttct ttgacagctc tgggggcaac gggcatgcgc tggagcatta
                                                                       840
                                                                      900
cagagacatg ggctacccac tagccgtgaa actgggaacc atcactcctg acggggcaga
                                                                      960
tgtttattct tttcaagaag aagaacctgt tttggatcct catttggcca agcacttagc
gcattttgga attgatatgc ttcatatgca tgggacagag aatgggctcc aggacaatga
                                                                      1020
                                                                      1080
catcaagctg agggtcagtg agtgggaagt gatccaggag tcgggcacga aactgaagcc
                                                                      1140
aatgtatggt cctggctaca cgggtctgaa gaacctgggc aacagctgct atctcagctc
                                                                      1200
tgtcatgcag gccatcttca gcatcccaga attccagaga gcgtatgtag gaaaccttcc
                                                                      1260
cagaatattt gactactcgc ctttagatcc aacacaagat ttcaacacac agatgactaa
gttaggacat ggccttctct caggccagta ttcaaagcct ccggtgaaat ctgaactcat
                                                                      1320
                                                                      1380
tgaacaggtg atgaaggagg agcacaagcc acagcagaac gggatctctc cgcgcatgtt
taaggccttt gtaagcaaga gccacccgga attctcctct aacaggcagc aagatgccca
                                                                      1440
ggaattette ttgcacetgg tgaatetagt agagaggaac egcategget cagaaaacec
                                                                      1500
                                                                      1560
aagcgatgtt tttcgttttt tggtggaaga acgcattcag tgctgtcaga cccggaaagt
                                                                      1620
ccgctacacg gagagggtgg attacctgat gcagttacct gtggccatgg aggcggcaac
caacaaggat gaactgatcg cttatgaact aacgagaagg gaagcagaag caaacagaag
                                                                      1680
                                                                      1740
accepttect gagttggtac gtgccaagat accatttagt gcctgccttc aggccttctc
                                                                      1800
tgaaccagaa aatgttgatg atttctggag cagtgcccta caagcaaagt ctgcgggtgt
                                                                      1860
gaaaacatct cgctttgctt cattccctga atacttggta gtgcagataa agaagttcac
                                                                      1920
ttttggtctt gactgggttc ccaaaaaatt tgatgtttct attgatatgc cagacctact
                                                                      1980
tgatatcaac catctccgag ccagggggtt acagccagga gaggaagaac ttccagacat
                                                                      2040
cagececee atagteatte etgatgaete aaaagatege etgatgaace aattgataga
cccatcagac atcgatgagt catcagtgat gcagctggcc gagatgggtt tcccgctgga
                                                                      2100
                                                                      2160
agcatgtcgc aaggctgtgt acttcactgg aaatatgggc gccgaggtgg ccttcaactg
gatcattgtt cacatggaag agccagattt tgctgagccg ctgaccatgc ctggttatgg
                                                                      2220
                                                                      2280
aggggcaget tetgetggag cetetgtttt tggtgettet ggaetggata accaacetee
                                                                      2340
agaggaaatc gtagctatca tcacctccat gggatttcag cgaaatcagg ctattcaggc
actacgagca acgaataata acctggaaag agcactggat tggatcttta gccaccctga
                                                                      2400
                                                                      2460
gtttgaagaa gacagtgatt ttgtgattga gatggagaat aatgccaatg caaacattat
                                                                      2520
ttctgaggcc aagcccgaag gacctagagt caaggatgga tctggaacat atgagctatt
tgcattcatc agtcacatgg gaacatccac aatgagtggt cattacattt gccatatcaa
                                                                      2580
                                                                      2640
aaaggaagga agatgggtga tttacaatga ccacaaagtt tgtgcctcag aaaggccccc
                                                                      2700
taaagacctg ggctacatgt acttttaccg caggatacca agctaaacct caaatataaa
                                                                      2738
aattggcgaa aagaagccat acgccttttt aatttgcc
       584
1548
DNA
Homo sapiens
<400> 584 aatgaaatgt gtacagcttg ccgtgttctg actgtaccct tccctcttcc atgtctgaga
                                                                        60
atctccgtgt attttaagaa tgtgtgagga gagggtggcg attcatgttt caatgagcct
                                                                       120
ctttttttt tttccttcct gttttggtct atggctggtc ttactctgtg tccatgttcg
                                                                       180
gaagetetag ttttgeatag aattatagag atgecaaaet etttgaaaag agatecaaat
                                                                       240
ttatcgcttg agagaaagaa aagaaacact attttttgta ttttacctga gatacagggg
                                                                       300
                                                                       360
cacaaataga tgagaatttt acagtgttag tgtatgtatc cctgagccta aaaaatgagg
                                                                       420
atataacett ttacagagag agtgaggegt ggtggtttta tatttatata tgaaaggeca
gcaagctcat gcgaaggata tacttttctt ccaaaaagcg gatttttttt tttttaatgt
                                                                       480
ttgaatctat atttgagatg ggagtttggt tggattaaac atgacacccc ggtgggcggt
                                                                       540
gtgtgtgtct gttgcacatg gcagggaggg gagcctcctt ctcatggggt tgccatggtg
                                                                       600
```

```
atcattggtt tttccatcaa aattgcatct tcatccatag attaccttcc ccttccctga
                                                                     660
cagtccataa ccaaaccttt aaacagaaca acctctttaa aaacttctct tgtgtttaac
                                                                     720
actttcttca tgccaacgaa acagggtaaa catgctcaaa acattaacag tctaaacaga
                                                                     780
                                                                     840
tatccaaata ctaagaagaa aaacaagtta tagcactttc aattttttt tttttttaa
                                                                     900
aaaaaggttt atagettttt etttteecat gteacaatgt eeactteeta agaagggttt
                                                                     960
aaaatactat qaaaactttc tttttgggga aaatatctat ttggtgtttg acacatcagt
aggtacttta aagacctgaa ttttatagta gctttaggag ttatatttta taaaaatcag
                                                                    1020
                                                                    1080
ttatgacttt atatttccag acaatagaga gttcagtaca tcatgctctt gtgcctctgc
ctgcttttcc tgcgttccca ccctgtattc cccccgcctt tcgggtttcc agggcttcga
                                                                    1140
                                                                    1200
gcttgatctt ttgaaagttt tattctatta aatttttgct atatcttctg gttttctgaa
                                                                    1260
aaagctttag aatggtttct ataccetttg tatcactgca tttttccata tcatctccgg
ttcgatcgcg tccagatgga aaacggaagc agaggcttct aatcgtcgca tttactggct
                                                                    1320
                                                                    1380
ccagtgcaac acatccatct gaaaacactc ggaagtctgg tgcttggaga gggtgccatt
gtctcttgta cataaggtca tgacgtgtct atgtcaaaag ttcttatata tttcttttat
                                                                    1440
aagctgaaag aaggtctatt tttatgtttt taggtctatg aatggaacgt tgtaaatgct
                                                                    1500
                                                                    1548
tgtcaaacaa taaaaataac gaaaagtgaa aaaaaaaaa aaaaaaaa
       Homo sapiens
<400> 585
gtggaagaga cctacttgca cattcttaac ctgtatttga acacaaaata tctatacttc
                                                                      60
atgctccage ccaagectat accetgtaat ageatactat tattgaaate gettgaeegg
                                                                     120
tettgtteac ataggeetet gggagtgatt tggttetttg ceetaatgtt teatttgaeg
                                                                     180
                                                                     240
qtctcttttt gatcaaccaa tttttctaaa agttcagtcg aaagctttta agtatagctt
                                                                     300
cctcccttga aaaaaaatgt aaactatgac tgctgagtga taaaacactg tggtgtgaaa
                                                                     360
gtgtcatctt cactgccaat caggcaaaga ccggaaagat ttgcatttta ttatgtctgt
cttatcatgc aatggaaatg atgctttttg taagtatgca tcttaccaat gatgtaatgg
                                                                     420
                                                                     480
tttaatacct ttgaatgttt taataaccaa gttgctgctg aacttatact aaatcagggg
                                                                     540
accaaaaaac ttgctcttat cttctcaaat tgtattctat atccattaat gtatcagtta
teccaaagee tteaggtgga ggggtttaee acetteetag gtegtteaae caggttttgt
                                                                     600
gaggaatgca ttcaaagtgg ctttataaaa gaagattttc tttagcaaga ataatgaggt
                                                                     660
                                                                     720
catgtcattt gttaataagt atctgtgata aatccgtggt tcaaggttaa gccattctgg
                                                                     780
tattctggta ttagcaactg taaattctgc cacctcatac atggaacaga gcttgtggga
tgctaatagt tagtgaagta tacatgattt aatttctaat aatctttatg ttttctttaa
                                                                     840
                                                                     900
ggatggtggt gtattgetet ttttcagett tatttttaag agtacagtea ggaaaccaac
                                                                     960
aaggggccta agagtggctg cccctgcttg ggacattaca gcaagtgaaa caaagttaat
gtgacaagct ttgctttgtt atcattggtc ttcactagag gatacctttt acatgtactt
                                                                    1020
                                                                    1080
ctctcttgga tcaaatatgt ctttaactgt acatctcagt ggctggaggc catgcctttt
aagcatgtgt aaaattttta aagaaatgaa catacacata gttattttag taatatttcc
                                                                    1140
                                                                    1200
tgaaagaaaa accaaattct gctataagtc ttgatcttca atgaactttt aaataatgca
                                                                    1260
tttagctgga aaacaagact ttctcagctt gtattaccta gaagcgtgaa tgtataggat
                                                                    1320
acctgactac taagactata ttctcagccc tgccctgtct tttatttgcg ggtctaatct
1380
                                                                    1440
cttcagtgtt tctccgagag actttccatt tccttggagt tatggcggca agtaagtatc
atagtattaa gaaatttgcc taaatctgag ttgtgccttt ctttactcac aaggcatggg
                                                                    1500
ctttgtcctg gtgatcagtt tgtaagcctt cttccttccc agctccttaa taaaagcaaa
                                                                    1560
                                                                    1620
gtgattgagt aggtaatgtt caaagtgtct gcctgtgtac atgtacttgt attgattatg
tagttcagta agatgtgccc aagtcatttc agaaagaaag acccttcagt tttgatgcat
                                                                    1680
```

```
tttgctgaac acttgggtag tgagtgggat cctatccagt tgaggaatgc ttgcaatgct
                                                                     1740
                                                                     1800
cattgaaggg atttgctttg ggactttgtc atcttccaga aaggaaacat attgtatatt
tggcccagtg tgattgattg ctttatcttt ggtaactttt acttgaatgg gatttgctga
                                                                     1860
                                                                     1920
attaatgact attgaattta aaactaatta tgagttgaca aataaataaa aggtagtgtt
                                                                     1952
tatgtctgaa aaaaaaaaaa aa
      586
4739
DNA
Homo sapiens
ggggagatag gtaggagtag cgtggtaagg gcgatgagtg tgggccgggc gggagtgcgg
                                                                       60
cgagagccgg ctggctgagc ttagcgtccg aggaggcggc ggcggcggcg gcggcagcgg
                                                                      120
cggcggcggg gctgtggggc ggtgcggaag cgagaggcga ggagcgcgcg ggccgtggcc
                                                                      180
agagtetgge ggeggeetgg eggageggag ageagegeee gegeetegee gtgeggagga
                                                                      240
                                                                      300
geceegeaca caatagegge gegegeagee egegeeette eeceeggege geeeegeeee
gegegegag egeceegete egecteacet gecaceaggg agtgggeggg cattgttege
                                                                      360
                                                                      420
cgccgccgcc gccgcgggg gccatggggg ccgcccggcg cccggggccg ggcctggcga
                                                                      480
ggcegcegeg cegeegetga gaegggeece gegegeagee eggeggegea ggtaaggeeg
                                                                      540
geogegecat ggtggacceg gtgggetteg eggaggegtg gaaggegeag tteeeggaet
                                                                      600
cagagecece gegeatggag etgegeteag tgggegacat egageaggag etggageget
gcaaggcctc catteggege ctggagcagg aggtgaacca ggagegette egcatgatet
                                                                      660
                                                                      720
acctgcagac gttgctggcc aaggaaaaga agagctatga ccggcagcga tggggcttcc
ggcgcgcggc gcaggccccc gacggcgcct ccgagccccg agcgtccgcg tcgcgcccgc
                                                                      780
                                                                      840
agccagegee egeegaegga geegaeeege egeeegeega ggageeegag geeeggeeeg
                                                                      900
acggcgaggg ttctccgggt aaggccaggc ccgggaccgc ccgcaggccc ggggcagccg
cgtcggggga acgggacgac cggggacccc ccgccagcgt ggcggcgctc aggtccaact
                                                                      960
                                                                     1020
tegageggat eegeaaggge catggeeage eeggggegga egeegagaag eeettetaeg
tgaacgtcga gtttcaccac gagcgcggcc tggtgaaggt caacgacaaa gaggtgtcgg
                                                                     1080
                                                                     1140
accgcatcag ctccctgggc agccaggcca tgcagatgga gcgcaaaaag tcccagcacg
                                                                     1200
gcgcgggctc gagcgtgggg gatgcatcca ggccccctta ccggggacgc tcctcggaga
                                                                     1260
gcagctgcgg cgtcgacggc gactacgagg acgccgagtt gaacccccgc ttcctgaagg
                                                                     1320
acaacctgat cgacgccaat ggcggtagca ggcccccttg gccgcccctg gagtaccagc
                                                                     1380
cctaccagag catctacgtc gggggcatga tggaagggga gggcaagggc ccgctcctgc
                                                                     1440
gcagccagag cacctctgag caggagaagc gccttacctg gccccgcagg tcctactccc
cccggagttt tgaggattgc ggaggcggct ataccccgga ctgcagctcc aatgagaacc
                                                                     1500
                                                                     1560
tcacctccag cgaggaggac ttctcctctg gccagtccag ccgcgtgtcc ccaagcccca
ccacctaccg catgttccgg gacaaaagcc gctctccctc gcagaactcg caacagtcct
                                                                     1620
                                                                     1680
tegacageag cagteceece aegeegeagt gecataageg geaceggeae tgeeeggttg
                                                                     1740
tegtgteega ggeeaceate gtgggegtee geaagacegg geagatetgg eecaacgatg
gegagggege ettecatgga gaegeagatg getegttegg aacaccacet ggataegget
                                                                     1800
gegetgeaga cegggeagag gageagegee ggeaceaaga tgggetgeee tacattgatg
                                                                     1860
                                                                     1920
actegecete eteategeee eaceteagea geaagggeag gggeageegg gatgegetgg
                                                                     1980
tctcgggagc cctggagtcc actaaagcga gtgagctgga cttggaaaaag ggcttggaga
tgagaaaatg ggtcctgtcg ggaatcctgg ctagcgagga gacttacctg agccacctgg
                                                                     2040
aggeactget getgeecatg aageetttga aageegetge caccacetet cageeggtge
                                                                     2100
                                                                     2160
tgacgagtca gcagatcgag accatcttct tcaaagtgcc tgagctctac gagatccaca
                                                                     2220
aggagtteta tgatgggete ttececegeg tgeageagtg gageeaceag cagegggtgg
                                                                     2280
gcgacctctt ccagaagctg gccagccagc tgggtgtgta ccgggccttc gtggacaact
                                                                     2340
acggagttgc catggaaatg gctgagaagt gctgtcaggc caatgctcag tttgcagaaa
```

```
tctccgagaa cctgagagcc agaagcaaca aagatgccaa ggatccaacg accaagaact
                                                                    2400
                                                                    2460
ctctggaaac tctgctctac aagcctgtgg accgtgtgac gaggagcacg ctggtcctcc
atgacttgct gaagcacact cctgccagcc accctgacca ccccttgctg caggacgccc
                                                                    2520
                                                                    2580
tecgeatete acagaaette etgteeagea teaatgagga gateacacee egaeggeagt
ccatgacggt gaagaaggga gagcaccggc agctgctgaa ggacagcttc atggtggagc
                                                                    2640
tgqtqqaqqq qgcccgcaag ctgcgccacg tcttcctgtt caccgagctg cttctctgca
                                                                    2700
ccaagctcaa gaagcagagc ggaggcaaaa cgcagcagta tgactgcaaa tggtacattc
                                                                    2760
cgctcacgga tctcagcttc cagatggtgg atgaactgga ggcagtgccc aacatccccc
                                                                    2820
tggtgcccga tgaggagctg gacgctttga agatcaagat ctcccagatc aagagtgaca
                                                                    2880
                                                                    2940
tccagagaga gaagagggcg aacaagggca gcaaggctac ggagaggctg aagaagaagc
                                                                    3000
tgtcggagca ggagtcactg ctgctgctta tgtctcccag catggccttc agggtgcaca
                                                                    3060
gccgcaacgg caagagttac acgttcctga tctcctctga ctatgagcgt gcagagtgga
                                                                    3120
gggagaacat ccgggagcag cagaagaagt gtttcagaag cttctccctg acatccgtgg
agetgeagat getgaceaac tegtgtgtga aacteeagae tgteeacage atteegetga
                                                                    3180
                                                                    3240
ccatcaataa ggaagatgat gagtctccgg ggctctatgg gtttctgaat gtcatcgtcc
                                                                    3300
actcagccac tggatttaag cagagttcaa atctgtactg caccctggag gtggattcct
                                                                    3360
ttgggtattt tgtgaataaa gcaaagacgc gcgtctacag ggacacagct gagccaaact
                                                                    3420
ggaacgagga atttgagata gagctggagg gctcccagac cctgaggata ctgtgctatg
                                                                    3480
aaaagtgtta caacaagacg aagatcccca aggaggacgg cgagagcacg gacagactca
tggggaaggg ccaggtccag ctggacccgc aggccctgca ggacagagac tggcagcgca
                                                                    3540
                                                                    3600
ccgtcatcgc catgaatggg atcgaagtaa agctctcggt caagttcaac agcagggagt
tcagcttgaa gaggatgccg tcccgaaaac agacaggggt cttcggagtc aagattgctg
                                                                    3660
tggtcaccaa gagagagag tccaaggtgc cctacatcgt gcgccagtgc gtggaggaga
                                                                    3720
                                                                    3780
tegagegeeg aggeatggag gaggtgggea tetacegegt gteeggtgtg gecaeggaca
                                                                    3840
tccaggcact gaaggcagcc ttcgacgtca ataacaagga tgtgtcggtg atgatgagcg
                                                                    3900
agatggacgt gaacgccatc gcaggcacgc tgaagctgta cttccgtgag ctgcccgagc
                                                                    3960
ccctcttcac tgacgagttc taccccaact tcgcagaggg catcgctctt tcagacccgg
                                                                    4020
ttgcaaagga gagctgcatg ctcaacctgc tgctgtccct gccggaggcc aacctgctca
ccttcctttt ccttctggac cacctgaaaa gggtggcaga gaaggaggca gtcaataaga
                                                                    4080
                                                                    4140
tgtccctgca caacctcgcc acggtctttg gccccacgct gctccggccc tccgagaagg
agagcaagct ccctgccaac cccagccagc ctatcaccat gactgacagc tggtccttgg
                                                                    4200
                                                                    4260
aggtcatgtc ccaggtccag gtgctgctgt acttcctgca gctggaggcc atccctgccc
cggacagcaa gagacagagc atcctgttct ccaccgaagt ctaaaggtcc cagtccatct
                                                                    4320
cctggaggca gacagatggc ctggaaacct ctggctaatc gggccatccg tagagcggga
                                                                    4380
                                                                    4440
accttcctga ggtgtccttg ggccaccccc aagtgttggg ccatctgcca agagacagcg
acccaaagcc gaaggacagg tggcctgggc agatctcgcc caggtctggg agccccaggc
                                                                    4500
                                                                    4560
tggcctcaga ctgtggtttt ttatgtggcc acccgagggc gccccaagcc agttcatctc
4620
agagtetaaa agatttetae tggateaett gteaagatge geeetetetg gggagaaggg
                                                                    4680
aacgtgaccg gattccctca ctgttgtatc ttgaataaac gctgctgctt catcctgtg
                                                                    4739
      587
490
DNA
Homo sapiens
<400> 587
atccctgact cggggtcgcc tttggagcag agaggaggca atggccacca tggagaacaa
                                                                      60
ggtgatctgc gccctggtcc tggtgtccat gctggccctc ggcaccctgg ccgaggccca
                                                                     120
                                                                     180
gacagagacg tgtacagtgg ccccccgtga aagacagaat tgtggttttc ctggtgtcac
```

240

gccctcccag tgtgcaaata agggctgctg tttcgacgac accgttcgtg gggtcccctg

```
gtgcttctat cctaatacca tcgacgtccc tccagaagag gagtgtgaat tttagacact
                                                                      300
                                                                       360
tctgcaggga tctgcctgca tcctgacgcg gtgccgtccc cagcacggtg attagtccca
gagetegget gecaecteca eeggacaect eagacaeget tetgeagetg tgeetegget
                                                                       420
cacaacacag attgactgct ctgactttga ctactcaaaa ttggcctaaa aattaaaaga
                                                                       480
                                                                       490
gatcgatatt
       588
2161
DNA
Homo sapiens
<400> 588 gggcgatect geeggageee egeegeegee ggettggatt etgaaacett eettgtatee
                                                                        60
ctcctgagac atctttgctg caagatcgag gctgtcctct ggtgagaagg tggtgaggct
                                                                       120
                                                                       180
tcccgtcata ttccagctct gaacagcaac atggggtgca aagtcctgct caacattggg
cagcagatgc tgcggcggaa ggtggtggac tgtagcccgg aggagacgcg gctgtctcgc
                                                                       240
tgcctgaaca cttttgatct ggtggccctc ggggtgggca gcacactggg tgctggtgtc
                                                                       300
                                                                       360
tacgtcctgg ctggagctgt ggcccgtgag aatgcaggcc ctgccattgt catctccttc
ctgatcgctg cgctggcctc agtgctggct ggcctgtgct atggcgagtt tggtgctcgg
                                                                       420
                                                                       480
gtccccaaga cgggctcagc ttacctctac agctatgtca ccgttggaga gctctgggcc
                                                                       540
ttcatcaccg gctggaactt aatcctctcc tacatcatcg gtacttcaag cgtagcgagg
                                                                       600
gcctggageg ccaccttcga cgagctgata ggcagaccca tcggggagtt ctcacggaca
cacatgacte tgaacgeece eggegtgetg getgaaaace eegacatatt egeagtgate
                                                                       660
                                                                       720
ataattetea tettgacagg aettttaaet ettggtgtga aagagtegge catggteaae
aaaatattca cttgtattaa cgtcctggtc ctgggcttca taatggtgtc aggatttgtg
                                                                       780
                                                                       840
aaaggatcgg ttaaaaactg gcagctcacg gaggaggatt ttgggaacac atcaggccgt
                                                                       900
ctctgtttga acaatgacac aaaagaaggg aagcccggtg ttggtggatt catgcccttc
                                                                       960
gggttctctg gtgtcctgtc gggggcagcg acttgcttct atgccttcgt gggctttgac
                                                                      1020
tqcatcqcca ccacaggtga agaggtgaag aacccacaga aggccatccc cgtggggatc
gtggcgtccc tcttgatctg cttcatcgcc tactttgggg tgtcggctgc cctcacgctc
                                                                      1080
                                                                      1140
atgatgccct acttctgcct ggacaataac agccccctgc ccgacgcctt taagcacgtg
                                                                      1200
ggctgggaag gtgccaagta cgcagtggcc gtgggctccc tctgtgctct ttccgccagt
cttctaggtt ccatgtttcc catgcctcgg gttatctatg ccatggctga ggatggactg
                                                                      1260
                                                                      1320
ctatttaaat tcttagccaa cgtcaatgat aggaccaaaa caccaataat cgccacatta
gcctcgggtg ccgttgctgc tgtgatggcc ttcctctttg acctgaagga cttggtggac
                                                                      1380
                                                                      1440
ctcatgtcca ttggcactct cctggcttac tcgttggtgg ctgcctgtgt gttggtctta
cggtaccagc cagagcagcc taacctggta taccagatgg ccagtacttc cgacgagtta
                                                                      1500
                                                                      1560
gatecageag accaaaatga attggcaage accaatgatt cecagetggg gtttttacca
                                                                      1620
gaggcagaga tgttctcttt gaaaaccata ctctcaccca aaaacatgga gccttccaaa
atctctgggc taattgtgaa catttcaacc agccttatag ctgttctcat catcaccttc
                                                                      1680
                                                                      1740
tgcattgtga ccgtgcttgg aagggaggct ctcaccaaag gggcgctgtg ggcagtcttt
ctgctcgcag ggtctgccct cctctgtgcc gtggtcacgg gcgtcatctg gaggcagccc
                                                                      1800
gagagcaaga ccaagctctc atttaaggtt cccttcctgc cagtgctccc catcctgagc
                                                                      1860
                                                                      1920
atcttcgtga acgtctatct catgatgcag ctggaccagg gcacctgggt ccggtttgct
                                                                      1980
gtgtggatgc tgataggctt catcatctac tttggctatg gcctgtggca cagcgaggag
gcgtccctgg atgccgacca agcaaggact cctgacggca acttggacca gtgcaagtga
                                                                      2040
cgcacagece egeceeeegg aggtggcage ageceegagg gaegeeeeca gaggaceggg
                                                                      2100
aggeacecea ecetececae eagtgeaaca gaaaceaect gegteeacae eeteactgea
                                                                      2160
                                                                      2161
```

<210> 589 <211> 2824

## <212> DNA <213> Homo sapiens

<400> 589 geggeegett tegatttege tttecectaa atggetgage ttetegeeag egeaggatea 60 gcctgttcct gggactttcc gagagccccg ccctcgttcc ctcccccagc cgccagtagg 120 ggaggacteg geggtacceg gagetteagg ceecaceggg gegeggagag teecagacee 180 ggccgggacc gggacggcgt ccgagtgcca atggctagct ctaggtgtcc cgctccccgc 240 gggtgeeget geeteeegg agettetete geatggetgg ggacagtact getaettete 300 gccgactggg tgctgctccg gaccgcgctg ccccgcatat tctccctgct ggtgcccacc 360 gcgctgccac tgctccgggt ctgggcggtg ggcctgagcc gctgggccgt gctctggctg 420 ggggcctgcg gggtcctcag ggcaacggtt ggctccaaga gcgaaaacgc aggtgcccag 480 540 ggctggctgg ctgctttgaa gccattagct gcggcactgg gcttggccct gccgggactt gccttgttcc gagagctgat ctcatgggga gccccgggt ccgcggatag caccaggcta 600 ctgcactggg gaagtcaccc taccgccttc gttgtcagtt atgcagcggc actgcccgca 660 gcagccctgt ggcacaaact cgggagcctc tgggtgcccg gcggtcaggg cggctctgga 720 780 aaccetgtge gteggettet aggetgeetg ggeteggaga egegeegeet etegetgtte 840 ctggtcctgg tggtcctctc ctctcttggg gagatggcca ttccattctt tacgggccgc 900 ctcactgact ggattctaca agatggctca gccgatacct tcactcgaaa cttaactctc 960 atgtccattc tcaccatage cagtgcagtg ctggagttcg tgggtgacgg gatctataac 1020 aacaccatgg gccacgtgca cagccacttg cagggagagg tgtttggggc tgtcctgcgc 1080 caggagacgg agtttttcca acagaaccag acaggtaaca tcatgtctcg ggtaacagag gacacgtcca ccctgagtga ttctctgagt gagaatctga gcttatttct gtggtacctg 1140 gtgcgaggcc tatgtctctt ggggatcatg ctctggggat cagtgtccct caccatggtc 1200 accetgatea ecetgeetet getttteett etgeecaaga aggtgggaaa atggtaceag 1260 ttgctggaag tgcaggtgcg ggaatctctg gcaaagtcca gccaggtggc cattgaggct 1320 1380 ctgtcggcca tgcctacagt tcgaagcttt gccaacgagg agggcgaagc ccagaagttt 1440 agggaaaagc tgcaagaaat aaagacactc aaccagaagg aggctgtggc ctatgcagtc 1500 aactcctgga ccactagtat ttcaggtatg ctgctgaaag tgggaatcct ctacattggt 1560 gggcagctgg tgaccagtgg ggctgtaagc agtgggaacc ttgtcacatt tgttctctac 1620 cagatgcagt tcacccaggc tgtggaggta ctgctctcca tctaccccag agtacagaag 1680 gctgtgggct cctcagagaa aatatttgag tacctggacc gcacccctcg ctgcccaccc 1740 agtggtctgt tgactccctt acacttggag ggccttgtcc agttccaaga tgtctccttt 1800 gcctacccaa accgcccaga tgtcttagtg ctacaggggc tgacattcac cctacgccct ggcgaggtga cggcgctggt gggacccaat gggtctggga agagcacagt ggctgccctg 1860 ctgcagaatc tgtaccagcc caccggggga cagctgctgt tggatgggaa gccccttccc 1920 1980 caatatgagc accgctacct gcacaggcag gtggctgcag tgggacaaga gccacaggta 2040 tttggaagaa gtcttcaaga aaatattgcc tatggcctga cccagaagcc aactatggag 2100 gaaatcacag ctgctgcagt aaagtctggg gcccatagtt tcatctctgg actccctcag ggctatgaca cagaggtaga cgaggctggg agccagctgt cagggggtca gcgacaggca 2160 gtggcgttgg cccgagcatt gatccggaaa ccgtgtgtac ttatcctgga tgatgccacc 2220 2280 agtgccctgg atgcaaacag ccagttacag gtggagcagc tcctgtacga aagccctgag cggtactccc gctcagtgct tctcatcacc cagcacctca gcctggtgga gcaggctgac 2340 2400 cacatcetet ttetggaagg aggegetate egggaggggg gaacceacca geageteatg gagaaaaagg ggtgctactg ggccatggtg caggctcctg cagatgctcc agaatgaaag 2460 ccttctcaga cctgcgcact ccatctccct cccttttctt ctctctgtgg tggagaacca 2520 2580 cagetgeaga gtageagetg cetecaggat gagttaettg aaatttgeet tgagtgtgtt acctecttte caageteete gtgataatge agaetteetg gagtacaaac acaggatttg 2640 2700 taattcctac tgtaacggag tttagagcca gggctgatgc tttggtgtgg ccagcactct 2760 gaaactgaga aatgttcaga atgtacggaa agatgatcag ctattttcaa cataactgaa

ggcatatgct ggccc	cataaa caccctgtag	gttcttgata	tttataataa	aattggtgtt	2820 2824
<210> 590 <211> 2545 <212> DNA <213> Homo sapi	iens				
<400> 590	anatt aanaataant	tatataaata	tasaassaa	taatattatt	60
	igactt ggaactccat catctt gctggttctg				120
	ctgcat cagcaccaac				180
	gcccc aagcccttcc				240
	acatg tctaaaccca				300
	ggtcag ccaaaagaaa				360
	agttcg aaaatctcaa				420
	aagtat tctgtgttaa				480
	ggcata taatacaaag				540
	gtaact aaagttagaa				600
	gattgt ctttgttctt				660
	ttagca atacccatgt				720
	ctggaa gagcagccct				780
	gtcagc aagtcctaag				840
	acctca ccaagctgct				900
	cacaat gtgtctgaga				960
	gtgtgt ggctttcaga				1020
	ctcagg ctgaccactt				1080
	ccatcc taccacaatg				1140
	tatctg agtcaactco				1200
	ccaatt catcctcact				1260
	ggacac acaaattato				1320
	ctcaat ggttaactaa				1380
	ttgagg gcaagagcca				1440
	gaacta ggttttaata				1500
	ttgtct cagagcaggt				1560
	cctctt acttattato				1620
	gtcttt ttatgacagg				1680
-	acttgc ggatattctg				1740
	ttacaa tgaaaaggad				1800
	attect tttecegaag				1860
	agatag ccaccgagat				1920
	tttact tgtttcagag				1980
-	agggaa cggtgaagta				2040
	ttggtg cccagttago				2100
	ttgtgt aggagaggtt				2160
	atcact gctcacacto				2220
	cttatc taatcatgaa				2280
	ttcata aatttgagag				2340
	actaac aaccaaagac				2400
	tataca tacatgcata				2460
	tgtata ccttgtaatt				2520
J J	<u> </u>		<b>3</b>	2 23	

591 2930 DNA Homo sapiens <400> 591 gaattccggt ttcttcctaa aaaatgtctg atggccgctt tctcggtcgg caccgccatg 60 aatgccagca gttactctgc agagatgacg gagcccaagt cggtgtgtgt ctcggtggat 120 180 gaggtggtgt ccagcaacat ggaggccact gagacggacc tgctgaatgg acatctgaaa aaagtagata ataacctcac ggaagcccag cgcttctcct ccttgcctcg gagggcagct 240 300 gtgaacattg aattcaggga cctttcctat tcggttcctg aaggaccctg gtggaggaag aaaggataca agaccctcct gaaaggaatt tccgggaagt tcaatagtgg tgagttggtg 360 gccattatgg gtccttccgg ggccgggaag tccacgctga tgaacatcct ggctggatac 420 agggagacgg gcatgaaggg ggccgtcctc atcaacggcc tgccccggga cctgcgctgc 480 ttccggaagg tgtcctgcta catcatgcag gatgacatgc tgctgccgca tctcactgtg 540 600 caggaggcca tgatggtgtc ggcacatctg aagcttcagg agaaggatga aggcagaagg gaaatggtca aggagatact gacagcgctg ggcttgctgt cttgcgccaa cacgcggacc 660 720 gggagcctgt caggtggtca gcgcaagcgc ctggccatcg cgctggagct ggtgaacaac 780 cctccagtca tgttcttcga tgagcccacc agcggcctgg acagcgcctc ctgcttccag 840 gtggtctcgc tgatgaaagg gctcgctcaa gggggtcgct ccatcatttg caccatccac cageceageg ecaaactett egagetgtte gaceagettt aegteetgag teaaggaeaa 900 960 tgtgtgtacc ggggaaaagt ctgcaatctt gtgccatatt tgagggattt gggtctgaac 1020 tgcccaacct accacaaccc agcagatttt gtcatggagg ttgcatccgg cgagtacggt 1080 gatcagaaca gtcggctggt gagagcggtt cgggagggca tgtgtgactc agaccacaag 1140 agagaceteg ggggtgatge egaggtgaae eettttettt ggcacegeee etetgaagag 1200 gtaaagcaga caaaacgatt aaaggggttg agaaaggact cctcgtccat ggaaggctgc cacagettet etgecagetg ceteaegeag ttetgeatee tetteaagag gacetteete 1260 agcatcatga gggactcggt cctgacacac ctgcgcatca cctcgcacat tgggatcggc 1320 1380 ctcctcattg gcctgctgta cttggggatc gggaacgaaa ccaagaaggt cttgagcaac 1440 teeggettee tettettete catgetgtte eteatgtteg eggeeeteat geetaetgtt 1500 ctgacatttc ccctggagat gggagtcttt cttcgggaac acctgaacta ctggtacagc 1560 ctgaaggcct actacctggc caagaccatg gcagacgtgc cctttcagat catgttccca 1620 gtggcctact gcagcatcgt gtactggatg acgtcgcagc cgtccgacgc cgtgcgcttt 1680 gtgctgtttg ccgcgctggg caccatgacc tccctggtgg cacagtccct gggcctgctg ateggageeg cetecaegte cetgeaggtg gecaettteg tgggeceagt gacagecate 1740 1800 ccqqtgctcc tgttctcggg gttcttcgtc agcttcgaca ccatccccac gtacctacag tggatgtcct acatctccta tgtcaggtat gggttcgaag gggtcatcct ctccatctat 1860 1920 qqcttaqacc gggaagatct gcactgtgac atcgacgaga cgtgccactt ccagaagtcg 1980 gaggccatcc tgcgggagct ggacgtggaa aatgccaagc tgtacctgga cttcatcgta ctcgggattt tcttcatctc cctccgcctc attgcctatt tggtcctcag gtacaaaatc 2040 2100 cgggcagaga ggtaaaacac ctgaatgcca ggaaacagga agattagaca ctgtggccga 2160 gggcacgtct agaatcgagg aggcaagcct gtgcccgacc gacgacacag agactcttct 2220 gatecaaece etagaaeege gttgggtttg tgggtgtete gtgeteagee aetetgeeea 2280 gctgggttgg atcttctctc cattcccctt tctagcttta actaggaaga tgtaggcaga ttggtggttt ttttttttt tttaacatac agaattttaa ataccacaac tggggcagaa 2340 2400 tttaaagctg caacacagct ggtgatgaga ggcttcctca gtccagtcgc tccttagcac 2460 caqqcaccqt qqqtcctqqa tqqqqaactq caagcagcct ctcagctqat ggctgcacag tcagatgtct ggtggcagag agtccgagca tggagcgatt ccattttatg actgttgttt 2520 2580 ttcacatttt catctttcta aggtgtgtct cttttccaat gagaagtcat ttttgcaagc

```
caaaagtcga tcaatcgcat tcattttaag aaattatacc tttttagtac ttgctgaaga
                                                                   2640
                                                                   2700
atgattcagg gtaaatcaca tactttgttt agagaggcga ggggtttaac ccgagtcacc
cagctggtct catacataga cagcacttgt gaaggattga atgcaggttc caggtggagg
                                                                   2760
gaagacgtgg acaccatctc cactgagcca tgcagacatt tttaaaaagct atacacaaaa
                                                                   2820
ttgtgagaag acattggcca actctttcaa agtctttctt tttccacgtg cttcttattt
                                                                   2880
                                                                   2930
592
1378
DNA
Homo sapiens
ggtagcagca tecaceggge gggaggtegg aggeagcaag geettaaagg etactgagtg
                                                                     60
                                                                    120
egeeggeegt teegtgteea gaaceteece tacteeteeg cettetette ettggeegee
caccgccaag ttccgactcc ggttttcgcc tttgcaaagc ctaaggagga ggttaggaac
                                                                    180
ageogegeee cectecetge ggeogeogee coetgeetet eggetetget cectgeogeg
                                                                    240
tgcgcctggg ccgtgcgccc cggcaggcgc cagccatgtc gatgctgccg tcgtttggct
                                                                    300
                                                                    360
ttacgcagga gcaagtggcg tgcgtgtgcg aggttctgca gcaaggcgga aacctggagc
                                                                    420
gcctgggcag gttcctgtgg tcactgcccg cctgcgacca cctgcacaag aacgagagcg
                                                                    480
tactcaagge caaggeggtg gtegeettee acegeggeaa etteegtgag etetacaaga
tectggagag ceaccagtte tegeeteaca accaecceaa actgeageaa etgtggetga
                                                                    540
aggegeatta egtggaggee gagaagetge geggeegaee eetgggegee gtgggeaaat
                                                                    600
atcgggtgcg ccgaaaattt ccactgccgc gcaccatctg ggacggcgag gagaccagct
                                                                    660
                                                                    720
actgcttcaa ggagaagtcg aggggtgtcc tgcgggagtg gtacgcgcac aatccctacc
categeegeg tgagaagegg gagetggeeg aggeeaeegg ceteaeeaee acceaggtea
                                                                    780
gcaactggtt taagaaccgg aggcaaagag accgggccgc ggaggccaag gaaagggaga
                                                                    840
                                                                    900
acaccgaaaa caataactcc tcctccaaca agcagaacca actctctcct ctggaagggg
                                                                    960
1020
acteggteet tetgetgeag ggeaatatgg gecaegeeag gageteaaae tattetetee
                                                                   1080
cgggcttaac agcctcgcag cccagtcacg gcctgcagac ccaccagcat cagctccaag
                                                                   1140
actetetget eggeceeete aceteeagte tggtggaett ggggteetaa gtggggaggg
                                                                   1200
actggggcct cgaagggatt cctggagcag caaccactgc agcgactagg gacacttgta
                                                                   1260
aatagaaatc aggaacattt ttgcagcttg tttctggagt tgtttgcgca taaaggaatg
                                                                   1320
gtggactttc acaaatatct ttttaaaaaat caaaaccaac agcgatctca agcttaatct
                                                                   1378
cctcttctct ccaactcttt ccacttttgc attttccttc ccaatgcaga gatcaggg
       593
2457
DNA
Homo sapiens
^{<400>} ^{593} cgctgttgcc tccgccacct cctccgccgc cgcgcgcccc tcggagttcc gcgccccacc
                                                                     60
atgcccaaca tegtgetgtt cageggeage tegeateagg acetateeea gegegtggee
                                                                    120
qaccqcctqq qcctqgagct gggcaaggtg gtcacgaaga agttcagcaa ccaggagacc
                                                                    180
                                                                    240
agcgtggaga ttggtgaaag cgtgagaggg gaagatgtct acatcatcca gagcggctgc
                                                                    300
ggggaaatta acgacaacct gatggaactc ctcatcatga tcaatgcctg caagattgcg
                                                                    360
tcatcatcca gagtaactgc cgtgatcccg tgtttcccat acgcccgaca agataaaaag
gacaagagtc gtgccccaat ttctgcaaaa cttgtggcca atatgctgtc ggtggctggg
                                                                    420
                                                                    480
gcggatcaca tcatcaccat ggacctgcat gcttctcaga tacagggatt ctttgatatt
cctgtggata atttgtatgc ggagcccgca gtcctgcagt ggattcggga aaacattgcc
                                                                    540
gagtggaaga actgtatcat tgtttcacct gacgcagggg gagccaaaag ggttacatca
                                                                    600
attgcagaca ggttgaatgt ggaatttgct ttgatccaca aagagaggaa gaaggcgaat
                                                                    660
```

```
720
qaaqtggacc ggatggtcct ggtgggcgac gtgaaggacc gtgtggccat cctcgtggat
                                                                      780
qacatggctg acacttgcgg caccatctgc catgctgcgg acaagctgct gtcagctgga
                                                                      840
gccaccaaag tgtatgctat ccttacccat gggatcttct ctggaccagc tatttccaga
ataaataatg ccgcctttga ggctgttgtc gtcacaaaca caattccgca agaggacaaa
                                                                      900
                                                                      960
atgaaacact gcaccaagat tcaggtcatt gacatttcca tgatcttggc cgaagcaatc
                                                                     1020
cgaaggacac acaatgggga atccgtgtcc tacctgttca gccatgtccc gctataaatc
cagaatggga agtgtccagc aagcctactc tgacttctga cttgtttttg ttttctggat
                                                                     1080
ttttagctgt aggtattcag caatgatagg ttaatcactg gcaaaagcat cagatctttg
                                                                     1140
                                                                     1200
tatatqctaa gatttattgt ttccccttct aaagctcaag atcatttctt tccagttttt
ggggaaatgg tggtggttat ttggtcttta agtgaactgt cttaaatgag aaacgttttt
                                                                     1260
gtcattttga cttttaacag gtacaggtga tctcttcctt tgttctttca gtactttgag
                                                                     1320
gcgacaactt tcaagtatat aatttcattg tggaagtcat agtttatata tttcgaggtt
                                                                     1380
gccaaaggtg acttcacatt aaagccttct gtgtaaatat atactgataa tgcctatgga
                                                                     1440
                                                                     1500
catttqqqta aaaccctgta tagaattaat tatcctttta ctttggagtg aaccttggaa
aatttataat tataatacca tggattttga attttccttt ttttttttt tttttggata
                                                                     1560
                                                                     1620
actcaqtttc aqataaacca tcttggttac tgtgcttaat ttggaccaaa ttttatttag
cttaatatgg acactgacac attttggggg gtatacatta gacatatcag agcagtgtat
                                                                     1680
ttctggatca ttttttaaat gacctcttct aaaacataac tgtcacttac ctgaaatgct
                                                                     1740
                                                                     1800
gcatcctaaa attccaaaat tatattgagc aatcgccaag gcctaaagcc aactgactta
                                                                     1860
aaqqtaatca tttcagctaa gattaaattt aaagcctaag aatgtataga gctagtttta
                                                                     1920
aaataatgat ctcagatttt taaaaaggat ataggaacct gcattgtcat tctctgaatt
                                                                     1980
aagaactgat ggtttctatc attatttagc cccacctttg tattttaaaa tccttcagaa
tacatttatg aaccaatgcg actggactta gccacacaca atggaaattc agaccttgac
                                                                     2040
                                                                     2100
tatttggtgt ttccagttca caaaggtgat gaagactgtc ttgggagcag cttaatccca
                                                                     2160
aaatttgtac atttcttgct gctcctggcg tggaaactta agtgagacca ccaaatacat
                                                                     2220
tggtcctgtc caattctact gaatgggggt ggacctggca tttatctggc caaaaacagg
                                                                     2280
agccagagaa atatgaatat accaaagttg tttgtttagc ctccaactta aattacatta
gtcaacttat agatactcat atgatcactt ttctttttag atactacatc aactagattc
                                                                     2340
                                                                     2400
aggagtatat catttgcagt gcttgtattg gtttaaaatg taagatttta agatcctcta
                                                                     2457
acactgtact aaaacatttc aataaaatca ttctgactgc gttcaaaaaa aaaaaaa
       594
1882
DNA
       Homo sapiens
<400> 594
gggcaggaag acggcgctgc ccggaggagc ggggcgggcg ggcgcgcgg ggagcgggcg
                                                                       60
                                                                      120
gegggeggga gecaggeeeg ggeggggge gggeggegg ggecagaaga ggeggeggge
                                                                      180
cgcgctccgg ccggtctgcg gcgttggcct tggctttggc tttggcggcg gcggtggaga
agatgctgca gtccctggcc ggcagctcgt gcgtgcgcct ggtggagcgg caccgctcgg
                                                                      240
                                                                      300
cctggtgctt cggcttcctg gtgctgggct acttgctcta cctggtcttc ggcgcagtgg
                                                                      360
tetteteete ggtggagetg ceetatgagg acetgetgeg ceaggagetg egeaagetga
                                                                      420
agcgacgctt cttggaggag cacgagtgcc tgtctgagca gcagctggag cagttcctgg
gccgggtgct ggaggccagc aactacggcg tgtcggtgct cagcaacgcc tcgggcaact
                                                                      480
ggaactggga cttcacctcc gcgctcttct tcgccagcac cgtgctctcc accacaggtt
                                                                      540
                                                                      600
atggccacac cgtgcccttg tcagatggag gtaaggcctt ctgcatcatc tactccgtca
ttggcattcc cttcaccctc ctgttcctga cggctgtggt ccagcgcatc accgtgcacg
                                                                      660
                                                                      720
tcacccgcag gccggtcctc tacttccaca tccgctgggg cttctccaag caggtggtgg
                                                                      780
ccategteca tgccgtgctc cttgggtttg tcactgtgtc ctgcttcttc ttcatcccgg
ccgctgtctt ctcagtcctg gaggatgact ggaacttcct ggaatccttt tatttttgtt
                                                                       840
```

ttatttccct gagca	ccatt ggcctggg	gg attatg	tgcc tggggaa	aggc tacaatca	aa 900
aattcagaga gctct	ataag attgggat	ca cgtgtt	acct gctactt	ggc cttattgc	ca 960
tgttggtagt tctgg					
tctatgtgaa gaagg	acaag gacgagga	tc aggtgo	acat catagaç	gcat gaccaact	gt 1080
ccttctcctc gatca	cagac caggcago	tg gcatga	aaga ggaccag	gaag caaaatga	agc 1140
cttttgtggc caccc	agtca tctgcctg	cg tggatg	gccc tgcaaa	ccat tgagcgta	agg 1200
atttgttgca ttatg					
catttttatc agaat	gcaaa agcgaaaa	tt atgtca	cttt aagaaat	tagc tactgttt	gc 1320
aatgtcttat taaaa	aacaa caaaaaa	ga cacato	gaac aaagaag	gctg tgacccca	agc 1380
aggatgtcta atatg	gtgagg aaatgaga	tg tccacc	taaa attcata	atgt gacaaaat	ta 1440
tctcgacctt acata	aggagg agaatact	tg aagcag	tatg ctgctg	tggt tagaagca	aga 1500
ttttatactt ttaac	tggaa actttggg	gt ttgcat	ttag atcatt	tagc tgatggc	aa 1560
atagcaaaat ttata	atttag aagcaaaa	aa aaaaag	cata gagatgi	tgtt ttataaa!	ag 1620
gtttatgtgt actgg	stttgc atgtacco	ac ccaaaa	tgat tatttt	tgga gaatctaa	agt 1680
caaactcact attta	ataatg cataggta	ac cattaa	ctat gtacata	ataa agtataa	ata 1740
tgtttatatt ctgta	acatat ggtttagg	rtc accaga	tcct agtgtag	gttc tgaaacta	aag 1800
actatagata ttttg	gtttct tttgatti	ct ctttat	acta aagaat	ccag agttgcta	aca 1860
ataaaataag gggaa	ataata aa				1882
040 505					
<pre>&lt;210&gt; 595 &lt;211&gt; 322 &lt;212&gt; DNA &lt;213&gt; Homo sapi</pre>	iens				
<400> 595 aaatatcata tggaa	aagaca taagaga	acc catagt	ggag aaaaac	ctta ccaqtqt	gaa 60
tactgtttac agtat					
aaaatcatga caaaa					
aagattctgg ctttt					
aaacggagaa aaaat					
aaaaaaaaaa aaaaa	aacttt ag				322
<210> 596 <211> 860 <212> DNA <213> Homo sapi	iens				
<400> 596 gactctcact gtcat	ttgcag aaaactc	tc tacaga	aatt actctc	aaag aaacctg	agg 60
atcgacctaa cacat	tctgaa atactaa	gga ccttga	actgt gtggaa	gaaa agcccag	aga 120
aaaatgaacg acaca	acatgt tagagcc	ctt ctgaaa	aagt atcctg	cttc tgatatg	cag 180
ttttccttaa attat	tctaaa atctgct	agg gaata	caat agatat	ttac cttttat	ttt 240
aatgtttcct ttaat	tttttt actattt	ta ctaat	etttc tgcaga	aaca gaaaggt	ttt 300
cttctttttg cttca					
ttttttttt tttt	aaagac agagtct	ege tetgti	gccc aggctg	gagt gcaatga	cac 420
agtcttggct cacto					
ctgagtagct ggatt					
agacagggtt tcacc					
ctgcctcggc ctccc					
tctttgttct aaaga					
aatcaattca tatct					
gttctctgcc tcaca		cag ctgga	gaaat atggta	ctca ttaaaaa	
aaaaaaagtg atgta	acaacc				860

<210> 597 <211> 2620

## <212> DNA <213> Homo sapiens

<400> 597	gggaaccgtc	tcctggttgt	ggggtggggg	ggaaagatgg	cggagctgat	60
				gacaacctgc		120
				gccgaggagc		180
				tccctggacg		240
				ttcccagatc		300
				tccgagtcat		360
				ctccatgtga		420
				tcctcatttg		480
				cagaccaaga		540
				tcagccgact		600
				tccctgtccc		660
				cagatcagca		720
				ccgccactgc		780
				cctcccagca		840
				gtcctcatcc		900
				cctgagagga		960
				gatgcaaagc		1020
				tcccggagaa		1080
				gctgacaacc		1140
ccgagagaat	gctgccctcc	ggcggcggct	ggaggccctg	ctggctgaaa	acagcgagct	1200
caagttaggg	tctggaaaca	ggaaggtggt	ctgcatcatg	gtcttccttc	tcttcattgc	1260
				gctcccatct		1320
gaacaagggg	gagcctcaac	cccggagaca	cttgctgggg	ttctcagagc	aagagccagt	1380
tcagggagtt	gaacctctcc	aggggtcctc	ccagggccct	aaggagcccc	agcccagccc	1440
cacagaccag	cccagtttca	gcaacctgac	agccttccct	gggggcgcca	aggagctact	1500
actaagagac	ctagaccagc	tetteetete	ctctgattgc	cggcacttca	accgcactga	1560
gtccctgagg	cttgctgacg	agttgagtgg	ctgggtccag	cgccaccaga	gaggccggag	1620
gaagatccct	cagagggccc	aggagagaca	gaagtctcag	ccacggaaga	agtcacctcc	1680
				agggattctg		1740
				ttggatgcaa		1800
				ctgctgctcc		1860
				cctgccatgg		1920
				atgatgcaga		1980
				gtgccccct		2040
				ttgccagtct		2100
				catccctgac		2160
				aggtgggact		2220
				gcaggtgtgg		2280
				ttatcagaat		2340
				aggggattgt		2400
				tgtttctcta		2460
					tttggagcta	2520
				ggtttatgtg	tgtgcatttc	2580
ttttttatta	ttactaaata	aacaacttgg	agggagttga	•		2620

<210> 598 <211> 455

```
DNA
Homo sapiens
<212><213>
       misc feature
n=a,t,g or c
<400> 598
acaccatgag cttcaatacc ctgtagagat acttcattct tctatttggt ttatttagaa
                                                                           60
atcacctatt ctgactgatc tttaagaatg aatgctataa agagctacca aattttcttt
                                                                          120
                                                                          180
caaattcata aaactgttca cacttttttg aaacaggagt taatgccgag aatccatcag
aagtatctac tgtttagaag gaaatggagc agcaccaaat gggtctaatt cgactggttg
                                                                          240
ggactgttgg gactgatgtg gagtgatgct ttgcaccaca agttctataa agggcacggc
                                                                          300
                                                                          360
accaaaatca tccattttca atacatctgc actatggaat gacccatgta gtgaattttg
tettggcccg ccctggcagg accagtattg tgatcagcac ggatgtcgct ncaggccctg
                                                                          420
                                                                          455
atggtggagg gtgccatgac agggtctgga gaatg
       599
448
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 599
aagaagtggc ccctctgcaa catgtcctca cagaaacgaa atggtgtgta gcaatcaaca
                                                                           60
ctagaaagta gaccttttgc aaattaatat gtccttgacc ttttttgccc ttttgtgggg
                                                                          120
gtgaggtggg gataaaaaga ctgtcatatc aagaactgtg acttttcttt ccctcaaaca
                                                                          180
atanaactcc tttattatct taatgctccc atgttaacat gtttgctgct aaattacaat
                                                                          240
qtaqaattga taatggttta tagtgaactg tgctcttccc tcattaaaat cccagggtgc
                                                                          300
cctggtaaag atgcagatgt ttcttcctga aaacttcttt ttttacaaag aaaattagat
                                                                          360
gtacatgtat aattcagtgt gctttgtctt tctccagatt aatatcggtt acactgctga
                                                                          420
                                                                          448
tgtttgtana ttanacagat atttactt
        600
567
        ĎŇÁ
Homo sapiens
       misc feature
n=a,t,g or c
agagaagačč gtggatcacc tggggacaga ggtgaaaggc ctgctgggct gctggaggag
                                                                           60
ctggcctgga acctgccccc gggacccttc agccccgctc ccgaccttct cggagatggc
                                                                          120
ttctgagccc tggagctgga gcccagcagt tggaggtggt gcacctgcca ggcagcgcca
                                                                          180
cagaaccagc cctgtcctct cgacttcctt ccttagcttc atgtgaaata aaagctattc
                                                                          240
tggtctcctc tgtgtctgct gacagagtaa cccgtttaac tacagcctcc tctcactcca
                                                                          300
                                                                          360
cttccatgcc tggaggaagc ctgcaacccc ctccaggctc agacctgggg acacccccan
                                                                          420
tcctgtcatt tataggggaa gatggagcag gggttgattc acacagatgg ggggccctct
                                                                          480
gaattggcct gcttctcaga atgttggcca taggtnaaaa gcaaggggat cggggttcag
gaccancaga atgtttagtg aatctgnatg aatgagaccc caggatttat gtgtccatta
                                                                          540
                                                                           567
agtggttgtt gtgntttaaa aaaaaaa
        601
283
DNA
        Homo sapiens
<400> 601 cccagtactg gtagacggag aagagcacgt cggttttcct taagacagat gggagttttg
                                                                           60
                                                                          120
tgqttcatga tataccttct ggatcttatg tagtggaagt tgtatctcca gcttacagat
```

ttgatccgtt	cgagtggata	tcacttcgaa	aggaaaatga	gagcagatat	gtgaattaca	180
tcaaacatca	gaggttgtca	gactgcccta	tcctctcaaa	tgaatcttca	ggtcacctct	240
tacttattaa	agggaatcgt	gggctgacag	cttctatgac	cga		283
-210 - 602						
<210> 602 <211> 263 <212> DNA						
<212> DNA <213> Homo	sapiens					
<400> 602	_			at ant anna	aggagget at	60
_	catacgtatc					120
	gagtccttag					
	aggtgactgt					180
	gaaagagctc		ggaaatgtga	accgcagctg	tgggtgtgac	240
caccgcctgt	gtagagtccc	agg				263
<210> 603 <211> 308						
<212> DNA	•					
	o sapiens					
<400> 603 gagcagcttg	ttgagacctg	tcgattgtta	cgacacatat	ctgggacaga	aacctctgga	60
	tatacatgca					120
	cattgacatt					180
-	cttgggaatc					240
	aaggaagacg					300
	aaggaagaog	<u> </u>			J J J	308
tatgcaac						
<210> 604 <211> 182						
<212> DNA	anniana					
<400> 604	o sapiens					
cctcggttgg	cacggtgcgt	cttgattaat	tagttactct	gactctggtc	tgccgagatc	60
catttccaac	ccagttgcgt	tgggagaggg	ttgggaggca	gcagagcatg	ggtgacagtg	120
ggagcacacg	acttccttgg	agcctgggcc	tttgcgggtc	ccaggtggtc	aggcagctgg	180
ag						182
-210. COE						
<210> 605 <211> 450						
<212> DNA <213> Home	o sapiens					
<400> 605		taatttaaaa	agaggatata	atatataata	aaatotooaa	60
	actaaccttg					120
	catcaccaag					
	aacgagcaaa					180
	tggaagttat					240
	ggggagggaa					300
	gttaaagtgg					360
ccccgctggg	atcacgtagg	ttcgtggctg	cagcaaaagt	tgggtttcac	aaagttgaaa	420
aacagccggt	ttctcaaaca	attgtgattt				450
<210> 606						
<210> 606 <211> 269 <212> DNA <213> Home						
<213> Hom	o sapiens					
<400> 606	cggctgccct	tactactaca	tagagtagag	agggagactt	ctttttatta	60
	aaaaacacaa					120
	atttaatgaa					180
						240
alayctctat	atttggggag	gggcactgtc		LLCALLLLCA	addigadyty	27

ttgttgcctt tgtatgtggt tcaaccatc	269
<210> 607 <211> 282 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 607 cttcattggc ccagcttggc gaaagcnagg cacactgctt actgccttgg ggttgtggag	60
atggacccgt gacctcgtgg aggccgtgtg ggggcagcag cctggcctgt gccatggtgg	120
gtgtcctggg gcctgtgcgg agggagccac ctcaccctgc agcccagttt gcaggtgtgg	180
ccttgtttct ccttgcccag cagtgctgcc ttcagcggcc gtgacggggc cagctggaca	240
cacggtgaga ttttntcgta tgtaaataaa aggnattttg gt	282
<210> 608 <211> 142 <212> DNA <213> Homo sapiens	
<400> 608 caaacctggc gtctatacca acatctgccg ctacctggac tggatcaaga agatcatagg	60
cagcaagggc tgattctagg ataagcacta gatctccctt aataaactca caactctctg	120
aaaaaaaaaa aaaaaaaaaa cc	142
<210> 609 <211> 348 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 609 gcaagtgtgg accccaggta gcctcttgga gatgaccgtt gcgttgagga caaatgggga	60
ctttgccacc ggatgcttgt nntngcacat ttcagggggg tcaggagagt taaggaggtt	120
gtgggtggga ttccaaggtg aggcccaact gaatcgtggg gtgagcttta tagccagtag	180
aggtggaggg accetggcat gtgcaacaga agaggccete tgggtgatga agtgaccate	240
acatttggaa agtgatcaac cactgttcct tctatggggc tcttgctcta gtgtctatgg	300
tgagaacaca ggccccgccg cttcccttgt agagccatag aaatattc	348
<210> 610 <211> 567 <212> DNA <213> Homo sapiens	<b>50</b>
caattttcta tcacactggg ctccatgata ttctgttccc taagaactgc ttctgtgtgc	60 120
cctgttttca tcccaagatt tctcacttca tcctctccta cctggctctt ttgtcccagg	180
gaggggtcct gttcggaagc agtggctgaa tttatcccct gaaagtggtt ttggaggaac	240
cgggatggag gaggcettee cetgtgggaa tagaategte caeteetage eetggttget tetgatacae agecaetgea caeacaeaet caeaeteaea eteeettgte tgatgeeeca	300
aagccaattc ctggggcacc ctaccetctc gttatttgga gtttccgttg gtttacctga	360
gttttctctg gggtctgcac agaggcagca gcatggacat catggcctct caggtccctt	420
ttggttctca gtttcattgg ttcctctttc tgttccccca ttgacttctg tgccccaccc	480
tagcetttte cataacetta ggtatteagt ttggaggggt tttttgtatt tttgaggatt	540
cctgtattct gtatcctctc ctcgcat	567
<210> 611 <211> 532 <212> DNA <213> Homo sapiens	

<400> 611 aacaacatga tatgtgctgg ac	tggaccgg ggccaggacc	cttgccagag	tgactctgga	60
ggcccctgg tctgtgacga ga				120
ggctctgcca gcatccagct gt				180
aagtcatacg ctccaactga tc				240
tgctgatcca gatgcccaga gg				300
teteceettg tetgeactgt te				360
teteacetea tteececace ta				420
agtggtggca aaggtttatt cc				480
agcagttact ggggtcacca ac				532
<210> 612 <211> 1522 <212> DNA <213> Homo sapiens				
<400> 612		aaaaaaat aa	aaaaaaaaaa	60
cgcgggggag aagcgggagc gg				120
cgggccatgg agctgtggcc gt				180
cagctgagcc gcgcggccga gt				240
acggtgtccg ccgtggcctc gc				300
aacatgagca tcatcggctg gt				360
gaggtgcggg acccgcgcag gc				420
cagagcatcc tggacatgat gg				480
gccaagcggg agctgctctt co				
ttcttcatca accggcagcg ct				540
cgcatggtca gggagaacct ca				600
ggggacctgc tgccttttaa ga				660 720
atcgtccccg tggtgtactc tt				
acttcaggaa cagtcacagt go				780
gcggacgtcc ctgcgctcgt gg				840 900
atctccaaga cccccagga ga				960
tagcccagac cacggcaggg ca				1020
atgggcagag gggactcctc co				1020
cactcagccc gggaagcagg aa				1140
gtcccctgca gggggctcag ct				1200
cggcacctct gggagctggg at				
ctgagccaca aggcccccga tg				1260 1320
cactgtccga gccctctgct ca				1380
gtccagccca caagctgcat ca				1440
cccagactca cgcaccctgg gc				1500
gcctggaaga ctctgtgggg to		igititita	taaacacact	1522
cttggaagtg gaaaaaaaaa aa	ì			1,722
<210> 613 <211> 550 <212> DNA <213> Homo sapiens				
<400> 613 cacgagccac catggatgtt tt	caaqaaqq qcttctccat	cgccaaqaaq	ggcgtggtgg	60
gtgcggtgga aaagaccaag ca				120
tcatgtatgt gggagccaag ac				180
agaagaccaa ggagcaggcc aa				240
tggccaccaa gaccgtggag ga				300
-3300	55 - 55 - 5 5-55	- 559	5 55 5-5-7	

aggaggactt gaggccatct gc	ccccaac	aggagggtga	ggcatccaaa	gagaaagagg	360
aagtggcaga ggaggcccag ag					420
ctgaagagcg ctcctctgcc tt	ggacacca	teceetecta	gcacaaggag	tgcccgcctt	480
gagtgacatg cgggtgccca cg	ctcctgcc	ctcgtctccc	tggacaccct	tggcctgtcc	540
acctgtgctg					550
<210> 614 <211> 460 <212> DNA <213> Homo sapiens					
<400> 614 gcaaagtgag ttttattttt tt	gtaattcc	tttatcttta	cttaaaggtg	aatgtgtatt	60
cctctgggag gaataggaag aa	aacaggaa	tgttaataat	gtcgaacaga	aaacttcctc	120
ccttattaat atataatcct ca					180
ttcttttgtt gcatgccctg tg					240
tttcctgtat aaagttagtg aa					300
tgcatatttt ttaaatttgt ca					360
actgatatac agatatacta at					420
aaatgttgtt accagtgaac ac	ccttgtgg	tttaacttkg			460
<210> 615 <211> 1595 <212> DNA <213> Homo sapiens					
<400> 615 ccggttcgca aagaagctga ct	tcagaggg	ggaaactttc	ttcttttagg	aggcggttag	60
ccctgttcca cgaacccagg ag					120
cgtgtaaaca cactacttat ca					180
ttcagaggaa gcgcctctga tt					240
gtttggagaa agcacagttg ga					300
acgatgcagc ggagactggt tc					360
gtgccctcct gcgggcgctc gg					420
gaacatcagc tcctccatga ca					480
cttcaccatc tgatcgcaga aa					540
cctaactcca agccctctcc ca					600
gagggcagat acctaactca gg					660
aagacacctg ggaagaaaaa ga					720
aaacggcgaa ctcgctctgc ct					780
gaccacctgt ctgacacctc ca					840
ctggcccgta gcctcagcgg gg					900
gcttggacaa acctagaatt tt					960
cagagaataa ctcagaatat tg					1020
tgtcctccag caccatagag ag					1080
catcaatcct ttaccactct ac					1140
atcttcataa tttgctggag aa					1200
ttcttcagtg tttttcattt ct					1260
gatattatct acaaacactg ca					1320
actttttatt taattaaatg ta					1380
taaattatgt tttaaacaca tg					1440
ccagctcata caaaataaat gg					1500
ggtttttctc atgtatcttt tt					1560
ccgtaggaaa aataaaactt ca					1595

```
616
383
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 616
tgccttccct tcaattttaa actgaagcat tttaatgtgg gtagaaactc tacaccaaat
                                                                         60
acactaaaca ttttggtgct tagtggattt ctttttaggt aactggtact tacttccaaa
                                                                        120
gactgaatac aagccacact ccatcatatc ccttaaactt catgaaaaac cattcaagat
                                                                        180
ccccttgctg caacactgtt ctcttcttct ctactaaatt ctatttccaa aattggtaat
                                                                         240
                                                                        300
agagccagaa ggatccccca gtacccagcc ctctgcctgg nacaaactgg gtagcacaat
                                                                         360
taaattcagt atggggtgga gcatggtaca gtcttgggtg gccaatagga aggggtagtt
                                                                        383
ggcataggtc acaccatnca ttt
       ĎŃĂ
Homo sapiens
       misc feature
n=a,t,g or c
<400> 617 cacgagetge tatgaagaca taettgagae teggtaattt atatagaaaa gaggtttaat
                                                                          60
tgacaaaaaa gctaacaaag tgagcccatg attcaaaaat gactgtctac acttggcaca
                                                                         120
tgagggactt tatgatatta agagattaat taaacaacag tggatgggga ggaagaacag
                                                                         180
acttttgagc tcttcccaat ataggaatgt gttagttcta aaaattttct taagttgttt
                                                                         240
gcttggaact cagagtntat ttatccatac gaaaaattca gaactatttn atttatgata
                                                                         300
                                                                         360
tqqqctaaaa aqacttctgt aatctagctt gggaaactta ataatcatta aacttatttt
                                                                         375
caatgaaaaa aaaaa
       618
222
DNA
Homo sapiens
ggggcatggc taacacctcc ctgggcctct tcttcctacc ttgattgagg gtgtgatgcc
                                                                          60
tggagccaca gcagccactt tgctaccatg acaaaaaggc caagagaatc acagagtcat
                                                                         120
tgaccctatc attatttcac caagccaata ccagccgcca tccttctcca gaattcttgt
                                                                         180
                                                                         222
619
471
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 619 ctgacacetg tecceegece eagtgactee gteteettea eecetgegge taccageact
                                                                          60
ccctctaaqc aggccctcca gttcttctgc tacatctgca aggccagctg ctccagccag
                                                                         120
                                                                         180
caqqaqttcc aggaccacat gtcggagcct cagcaccagc agcggctagg ggagatccag
                                                                         240
cacatgagec aagectgect cetgteeetg etgeeegtge eeegggaegt eetgggagae
agaggatgag gagcctccac caaggcgctg gtgcaacacc tgccagctct actacatggg
                                                                         300
                                                                         360
qqqacctqat ccaacaccgc aggacacagg gaccacaaga tttgccaaac aatcctttgc
                                                                         420
qqaccttntt qcaccttttg caaccgttat tttnaaaacc cttcggcaat ttgtnggagc
                                                                         471
aaqttqaaqt tccngggggc ttaagggtca aaaggccaag gagttgaagg t
```

```
620
403
DNA
       Homo sapiens
      misc feature
n=a,t,g or c
<400>
       620
gagaagagga tctggctgct ctgtttgaag cttcaatgaa actgtattaa ttgtcatttt
                                                                       60
aactqaaaqa attaccqctq gccattqtag tgctgagagc aagagctgat ctagctaggg
                                                                      120
ctttgtcttt tcatctttgt gcataactta cctgttacca gtataggtgg gatatacatt
                                                                      180
                                                                      240
tatcttgcag gaaattcccc aaagctcaga gtccagttcc ttccataaaa caggctggac
aaatqaccac tatgttagac ccccagggct cgacttcagg ggtcagtgtt cctgtcccaa
                                                                      300
accccacaca gaatactctg gcctctggct ttcatgtagg ccaaatgagg caaaaaactt
                                                                      360
                                                                      403
caqtatctat tcaaaagtgg taaaattatt atttccnatg ggc
       621
380
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 621 ggcttttggc cangcttctt tacagcatcc tgcactccag cctgggtgac acagtgagac
                                                                       60
                                                                      120
tccqtctcca aaaaaaagga tgaggaatag aattctgtgc agatgtcctg acttggcaat
tttgtgtccc tgcctcactg tctccaccaa cccccgcctg tcctagtgtt gttctgcctc
                                                                      180
ctqtcctctc ttgctctctt gtcagtctct ggcttcctcg gccccatttc acttcactga
                                                                      240
300
360
                                                                      380
aaaaaaaaa aaaaaaaaa
       622
511
DNA
       Homo sapiens
<220>
<221>
<223>
       misc feature
n=a,t,g or c
<\!\!400\!\!> 622 gctggaagaa cctttgtctg agggtagttc atagctggaa atacttggaa tattttccag
                                                                       60
agtetetaaa eteteatett eecceacaga tacacateca ageteacaaa taggagtage
                                                                      120
                                                                      180
aattctaggt ggtagggttg tgtacggaac ccctggctgt ctgcatatat ctcagaatta
ccccaggacc attgtcccaa agtctagagt ctttacaggt aggcaaaatt tgttttcaat
                                                                      240
geotytycet cagetyctyt cacaaatace catettagga teccateage tteccatece
                                                                      300
ccaccagaca gccacagtac cctcactttc tccctattgt tctttcaaat cctgttctca
                                                                      360
                                                                      420
ggaaagaaac tgccactaat tcattcacac taaggtgtaa anggattgat aatagggatt
gagttacctt ttcccacaga cnttgttttt aagtatggac agagcgggcc ttattccagg
                                                                      480
                                                                      511
qqaaaqgttt gggactggag ggggtgaggt t
       623
1700
DNA
Homo sapiens
<400> 623 cggcggccca gactatecgc teccacegeg ceceeggeec acetggtgge eeeggeetgg
                                                                       60
ecgecgecce egegetgtge eegggagete gteeeggaeg egegaeeggg eggegggge
                                                                      120
teggeggeea eegetgeete aagggagega ggegggaggg tgtgtgtgeg eggetgtgag
                                                                      180
caqqqqtqcc qgcqqgctqc agcggaggca ctttggaaga atgactctgg agtccatcat
                                                                      240
```

```
300
ggcgtgctgc ctgagcgagg aggccaagga agcccggcgg atcaacgacg agatcgagcg
                                                                      360
gcagctccgc agggacaagc gggacgcccg ccgggagctc aagctgctgc tgctcgggac
aggagagagt ggcaagagta cgtttatcaa gcagatgaga atcatccatg ggtcaggata
                                                                      420
                                                                       480
ctctqatqaa gataaaaggg gcttcaccaa gctggtgtat cagaacatct tcacggccat
gcaggccatg atcagagcca tggacacact caagatccca tacaagtatg agcacaataa
                                                                       540
                                                                       600
ggctcatgca caattagttc gagaagttga tgtggagaag gtgtctgctt ttgagaatcc
atatgtagat gcaataaaga gtttatggaa tgatcctgga atccaggaat gctatgatag
                                                                       660
                                                                       720
acgacgagaa tatcaattat ctgactctac caaatactat cttaatgact tggaccgcgt
                                                                       780
agetgaceet geetacetge etacgeaaca agatgtgett agagttegag teeccaceae
agggatcatc gaatacccct ttgacttaca aagtgtcatt ttcagaatgg tcgatgtagg
                                                                       840
                                                                       900
gggccaaagg tcagagagaa gaaaatggat acactgcttt gaaaatgtca cctctatcat
                                                                       960
gtttctagta gcgcttagtg aatatgatca agttctggtg gagtcagaca atgagaaccg
aatggaggaa agcaaggctc tctttagaac aattatcaca tacccctggt tccagaactc
                                                                     1020
                                                                     1080
ctcqqttatt ctgttcttaa acaagaaaga tcttctagag gagaaaatca tgtattccca
                                                                     1140
tetagtegae taetteecag aatatgatgg acceeagaga gatgeecagg cageecgaga
                                                                     1200
attcattctg aagatgttcg tggacctgaa cccagacagt gacaaaatta actactccca
                                                                     1260
cttcacgtgc gccacagaca ccgagaatat ccgctttgtc tttgctgccg tcaaggacac
                                                                     1320
catectecag ttgaacetga aggagtacaa tetggtetaa ttgtgeetge tagacaceeg
ccctgccctt ccctggtggg ctattgaaga tacacaagag ggactgtatt tctgtggaaa
                                                                     1380
                                                                      1440
acaatttgca taatactaat ttattgccgt cctggactct gtgtgagcgt gtccacagag
                                                                      1500
tttgagtaaa tattatgatt ttatttaaac tattccagag gaaaaacaga ggatgctgaa
gtacagtccc agcacatttc ctctctatct ttttttaggc aaaccttgtg actcagtgta
                                                                      1560
                                                                      1620
ttttaaattc tcagtcatgc actcacaaag ataagacttg tttctttctg tctctctctc
tttttctttt ctatggagca aaacaaagct gatttccctt tttttcttcc cccgctaatt
                                                                      1680
                                                                      1700
catacctccc tcctgatgtt
       624
2255
DNA
Homo sapiens
<\!400\!> 624 gctggcctgt ttgggtactg ggggaacaaa ggtggagtca acatctgcct gaagctttat
                                                                        60
                                                                       120
ggctactatg tcagcatcat caactgccac ctgcctcccc acatttccaa caattaccag
                                                                       180
cggctggagc actttgaccg gatcctggag atgcagaatt gtgaggggcg agacatccca
aacatcctgg accacgacct cattatctgg tttggagaca tgaactttcg gatcgaggac
                                                                       240
                                                                       300
tttqqqttqc actttgttcg ggaatccatt aaaaatcggt gctacggtgg cctgtgggag
aaggaccage teageattge caagaaacat gaccegetge teegggagtt ceaggaggge
                                                                       360
cgcctactct tcccgcccac ctacaagttt gataggaact ccaacgacta tgacaccagt
                                                                       420
                                                                       480
gaqaaaaaac gcaagcctgc atggaccgat cgcatcctgt ggaggctgaa gcggcagccc
                                                                       540
tgtgctggcc ccgacactcc cataccgccg gcgtcacact tctccttgtc tctgaggggc
                                                                       600
tacagcagce acatgacgta cggcatcage gaccacaage etgteteegg cacgttegae
                                                                       660
ttggagetga agecattggt gtetgeteeg etgategtee tgatgeeega ggaeetgtgg
                                                                       720
accytygaaa atgacatgat gytcayctac tetteaacet cygaetteee cagcayeecy
tgggactgga ttggactgta caaggtgggg ctgcgggacg ttaatgacta cgtgtcctat
                                                                       780
                                                                       840
gcctgggtcg gggacagcaa ggtctcctgc agcgacaacc tgaaccaggt ttacatcgac
                                                                       900
atcagcaata tecetaceae tgaagatgag ttteteetet gttactacag aaacagtetg
                                                                       960
cgttctgtgg tggggataag aagacccttc cagatcccgc ctggctcctt gagggaggac
                                                                      1020
ccactgggtg aagcacagcc acagatctga gccaggatgg gagtgaatcc caggcggagg
                                                                      1080
ccagagetgg cagecagete tgeettteea etgeegggag tgetggggge ccageetgge
cccctgaaga gacagccaag tgtcgtccac atactcctcc cagagtgagc tctaaccagg
                                                                      1140
```

<220>

```
1200
ctcatttgct ctctccacta ctcatctctg gaattagccg cttaaataca ggtttttgtt
gctgagatgt gagtgaaacc agctagtgtg tcaacagtga agacctgggg acagttctgc
                                                                     1260
                                                                     1320
qtctcatttc tqqattccta cccctcttc tagtcttgcc caagtagtcc tgccaggcac
                                                                     1380
atgccccatt tggcacaggc ctgcattctt gtcgtgccgt cctgggcctc aggctgtctg
                                                                     1440
ggaggggaga tgctcacatt tgtacaggct acatagactg gtgcaagcag tgctggattc
                                                                     1500
caggagtett ggcateteat agettgteec cgtgaggagt gagcagaggg tetgggattt
                                                                     1560
ctgctttcag caaaagcagt ctgactcagt gggcagaatg gaggggcccc tctagccagg
ctcttacgcc atggttatga gcaggttgat gagggtcctt cggccagcac aaccttcctc
                                                                     1620
cctactcacg gcatggagtc tgactgcatg gaagttccag atcctgacag agagaactgg
                                                                     1680
                                                                     1740
gaaggateca ggttegette egttggtage ttgagtecea tgeetecace etgecatetg
aggaaggggt gacaagtggt caaggagctg tggccacaga cttttccagg gtggtccttg
                                                                     1800
                                                                     1860
gcaggtgagg tgcgtctgts ccaccettgt caggagecat tgacgacggg ccccccctgg
                                                                     1920
acccccggg acctcagagt gggggcaggc agaagggaga accagctcaa gacattttgg
                                                                     1980
aggatetgge cetggggtte tteagagaac accetetagg ggetttgggg acatggeetg
tececacate cageacttge etecgecatg gteactegge agecetttte ceaggagaag
                                                                     2040
                                                                     2100
acacctctgg gagcctgctc agtgcttgtc ctgccatcct gtgtcctggg actgagggtt
actocagttg ctctgtgttg catactotcc cocgcaagcc tgtgtatgaa gaattgtccc
                                                                     2160
                                                                     2220
ctggcttcca gcaggccatg gctggctgtt ttgtgactgt tacattgtgc aggggtaatt
                                                                     2255
attagcgtgg cttttaaaaa aaaaaaaaaa aaaaa
      625
1259
DNA
Homo sapiens
                                                                       60
cggcgcccaa geggeeecag egggetegeg tegeeeeget etecteaceg ageegeeaat
                                                                      120
gggctcagga tccgccctg acgacgcggg ccccgcccct ggagacacgc accgcgcagt
                                                                      180
cgtcacccgc ccgggatcag gaggccgggg gcgcccgccg gtcgggcctg ggcggccgcc
atgaagetga egeggaagat ggttetgaee egageeaagg eeteggaget geacagegtg
                                                                      240
cgcaagetca actgetgggg cageegeete acagatatet ceatttgeca ggagatgeee
                                                                      300
                                                                      360
agcctggagg tgatcacgct cagtgtcaac agcatctcca ccctggagcc tgtgagccgg
tgccagcgcc tgagtgagct gtacctgcgg aggaaccgca tccccagcct ggctgagctc
                                                                      420
                                                                      480
ttctacctga aggggctgcc gcgtctgcgg gtgctgtggc tggccgagaa cccgtgctgc
                                                                      540
ggcaccagcc cccacgccta ccgcatgacc gtgctgcgca ccctgccgcg cctacagaag
ctggacaacc aggctgtgac ggaggaggag ctgtcccgtg cactgagtga gggagaggag
                                                                      600
                                                                      660
atcactgcgg ccccagagag agagggcaca ggccacggcg gccccaagct atgctgcaca
                                                                      720
ctgagetece teageteege tgetgagaet ggeegggaee egetggaeag egaggaggag
                                                                      780
gcaaccggcg cccaggatga acgtggcctg aagccgcctt cccggggcca gtttccttcc
ctctcagcca gggatgcctc gagcagccac aggggcagga acgtcctgac tgccatcctg
                                                                      840
ctgctgctgc gggagctgga tgcagagggg ctggaggccg tgcagcagac tgtgggcagc
                                                                      900
                                                                      960
eggetgeagg ecetgegtgg ggaagaggtg eaggageacg eegagtgace geaggacetg
aacgccgctc cagcctccac ggggacccca gcgtcttccc cagcccccgg gagctggagg
                                                                     1020
gtggctgcca tggccgcagc cccggcccca cacaaaagcc tccccggttt gccacatcgg
                                                                     1080
                                                                     1140
ccgagggcag gagtgggtgt taggtactgg ctaaccgggg cggtggagat gcctgtctac
                                                                     1200
accagtectg teccaggact eccettetgt ggtetggagg ttetaggetg geetgggete
ttaaagggag gattttgcag gctgtcctcc ctaataaaag attttcccaa aaaaaaaaa
                                                                     1259
       626
563
DNA
Homo sapiens
```

## misc feature n=a,t,g or c <400> 626 ggggggggnt tactcacaaa ggacagaaat ctccaccaag gaagtcccca ttgtccaaac 60 tgagaccaaa accatcacat atgagtctcc acagattgat ggcggggctg gtggtgattc 120 180 qqqcacqtta ctgaccqcac aaaccatcac atctgagtcc gtgtcaacaa cgacaaccac acacatcacc aagactgtaa aaggtggaat ttctgaaaca agaattgaga aacgcattgt 240 300 qatcacagga gatggagata ttgatcatga ccaggcactg gctcaggcga tcagggaagc cagagagcag caccctgaca tgtcggtcac aagagtggtg gtacacaaag aaacagagtt 360 420 qqctqaqqaa ggggaagatt aagttagaaa gtcatttttt tanacaacac tcanctttgg 480 gaacccetga gggattttnt gggcccccnc cgganttcag nttgggcttn accagttgac ttggnaannn nnnnntnnnn ennnnntnnt nnnnnntnen neetnnnnen nnnnnnennt 540 563 nttccncnnn nnttnnnnnn ncg 627 432 DNA Homo sapiens misc feature n=a,t,g or c <400> 627 aaaccatttg actcggtttg cctccctgcc cgttgtttaa accttacaaa ccctggataa 60 120 ccccatcttc tagcagetgg ctgtcccctc tgggagetct gcctatcaga accctacctt aaggtgggtt teetteegag aagagttett gageaagete teecaggagg geecacetga 180 240 ctgctaatac acagccctcc ccaaggcccg tgtgtgcatg tgtctgtctt ttgtgagggt tagacagcct cagggcacca tttttaatcc cagaacacat ttcaaagagc acgtatctag 300 360 acctgctgga ctctgcaggg gggtgagggg gaacaagcga gacctttggg gtaatgantt aacaccccat gctgggggat gcatggaagg tgaaaggggg ccagggaacc agttggaaga 420 432 attttccaat cc 628 430 DNA Homo sapiens <210> <211> <400> 628 cttgctccct ctttctctta ctttttcctt ttggcatgtt taattagaga acattttcta 60 120 taagcattat taagaataat tgtccttaag gaatgatgga taatataagg gaaatgaaaa taataaagaa aatgctacat ggaatctctt attcttgaac catgttcaga cactattagc 180 240 tqtqaccact qcaataggaa atgaaaaaga gggtactttt tcactgaaaa tcccactgtt 300 caaagaaaca aagaaacggc cacataaact aaatattcac aatactggaa atgaaccaca qactttttga gtaatactcc agtgaactca tgtccttaaa tgagaagggc agccacagac 360 atctgcccac tggaactctc tggtggccac atttagggat gcattcttcc ttacaagggc 420 430 agccacctgt Homo sapiens misc feature n=a,t,g or c <400> 629 cggagatcaa acaagattta ttcaatttgg tcaaagcaag aagttgggag agcaagatgt 60 ctcaaatcca tcttaacaaa aagaggaagc agtgagtttt taggtagcta aggagtaaag 120 180 gagaggcagt ttcagggaag tgagggggaa aagtctgcgt ttctttattc tcaggtaaca

tettgageaa ceagatteet gngtateage agetggtege aaegteette aaggeattea

240

ttccttctgc aaattttttc atgaccctca agtgaccttc tcatgt	cttc tttaggttgg 300
gacttggtga gcagttcagg tgatttgatt ctngtgcagt ccagtn	33 33
gttcagtcat ttgagactga acttngaget ggatggaten ttette	
ggtgatgctt gggaggctaa aattetteet	450
gytyatytti gygaggttaa aattettet	130
<210> 630 <211> 265	
<212> DNA <213> Homo sapiens	
<400> 630	
tctggaaaaa acacgcttta ttgggtagac aaataggcct gatggg	
agtgcactgg ggagtgaaaa agtaggcaaa gtgcttgaag cttccc	
taacctcctg gggagcagct ctggacactc agtacccaga cctggg	
gggtgactgt gcccctcact cctgctgcct gatctgggca gcccac	
acagaattet caagggatag gegea	265
<210> 631 <211> 491	
<212> DNA .	
<213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 631 tgtggtgagg gctttgggct tgttccctga agctttttat tataaa	aaca agatgaaaca 60
tagatcacat tgcagtctcg attgtaatga acctcagctg aatgtg	
tctgatctaa tgtggacttt gaagcatttt gaaatgaaaa aatctt	
tttaaaattc ctgtggttgt tcgctaaatg gcaaaatagg gggcca	
tccagaccac ctacagaaag aaagtctcag gccattatga aggccg	
atcttcttct gggtgcacag ccctgcggcc atccccaccg tgagat	
gtgcaaggat cagcacccag tgtagaaact gacttgtacc ccgaag	
ttcccaacag gctcattcca gatataaaaa atatgtcatc actttc	
aanccaacan t	491
-210 - 632	
<210> 632 <211> 388 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 632 aaagacacat gcacacgtat gtttattgtg gcaccattca taatag	taaa acattttctt 60
tttggtgtga gagaccctcc cattccttag taaaaacgta tttact	
gtccttacaa acttgttttt ccctagagca attgattttg ctttag	
tctagaggca atacaattta ggatccttgt ctagaaatca atatga	
agccaaatga tatctgtaga ctccagttgt gtgcaagccc tgtgtg	gagc ctcaagtcat 300
ctgcgttagt ccagcttcct attcttggaa atcagctttg cttgat	tgga cctatattgg 360
catgttaatg tttgatggtg gcctggcc	388
~210\ 633	
<210> 633 <211> 516 <212> DNA	
<213> Homo sapiens	
<400> 633 ttttttttt tttttcagca aatgtttgtt gaattttatt actttt	taaa caaattactg 60
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aataga	aatt tataagagtt 120
tttatttttg ttacttgtaa aagtatattt cctagagaaa atatca	
cagaaaaagt aagtgtgtgt gttctaaaca gtgattccaa ctcaat	
cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactg	
ttgttctatt tctttatttt agctttacag agattaggtc tcaagt	tatg agaatctcca 360

<210> 638

tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct	420 480 516
<210> 634 <211> 314 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 634 tittitittt tittittga gigigittit aaigcalitt tillaaagat taaagtaaaa	60
tgtctcaatt gtaaaaaata cacaccgggc aaatccttac ctggataata aatatctaca	120
tcacagtaca ataaaatttc ttctctataa aatttaaata tggattatag tctatcacta	180
tcaaaagaaa cactatgcta atatttccat attattaaaa taacaggaaa aattacgggg	240
cttattttag aacctgangc catagccgtt ggaaagggca aagagntttc aaatgtcgat	300
catcactctc catt	314
<210> 635 <211> 233 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 635 gaaagttcag ttcagtttat tacagtgtca agtagattta caactattgc acttatcatt</pre>	60
ctggtgacag aaggccaaaa ctgaagattg agattttcct ctaataaaga taggttttca	120
gaatcttcaa tataagatgt taaaattata aaggcaaaga tatatacctc atgttccatt	180
ccatatcctt cctgctgttg tacagtttgc tgcaaatgat aatttaattt	233
<210> 636 <211> 361 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<220> <221> misc feature <223> n=a,t,g or c <400> 636	60
<220> <221> misc feature <223> n=a,t,g or c  <400> 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca	60 120
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg</pre>	
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg</pre>	120
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc</pre>	120 180
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattggggt aagggctgtg</pre>	120 180 240
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc</pre>	120 180 240 300
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattggggt aagggctgtg gtttcgaggc cgtctgtggc gccccagcc cctaagtctg cgagacgccg gccccgcctt t  </pre> <pre> &lt;210&gt; 637 &lt;211&gt; 407 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre>	120 180 240 300 360
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattgggt aagggctgtg gttcgaggc cgtctgtggc gcccccagcc cctaagtctg cgagacgccg gccccgcctt t</pre>	120 180 240 300 360
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattgggt aagggctgtg gtttcgaggc cgtctgtggc gcccccagcc cctaagtctg cgagacgccg gccccgcctt t  &lt;210&gt; 637 &lt;211&gt; 407 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 637 </pre>	120 180 240 300 360 361
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; masc feature &lt;223&gt; masc feature &lt;223&gt; cased gaacgttgct that catt get get a cattle contained get get get get get get get get get get</pre>	120 180 240 300 360 361
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattgggt aagggctgtg gttcgaggc cgtctgtggc gccccagcc cctaagtctg cgagacgccg gccccgctt t  &lt;2210&gt; 637 &lt;2211&gt; 407 &lt;2212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 637 ttttcatttt tcttacttt aatatctaag ataaaaaaa aaacccaacc accaaaacaa cccatttgca tgtcggcgac acgctggtct cgggctccct ttctgggct gtcctccag </pre>	120 180 240 300 360 361
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c   4400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattggggt aagggctgtg gttcgaggc cgtctgtggc gccccagcc cctaagtctg cgagacgccg gccccgcctt t  &lt;210&gt; 637 &lt;211&gt; 407 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 637 ttttcatttt tcttacttt aatatctaag ataaaaaaaa aaacccaacc accaaaacaa cccatttgca tgtcggcgac acgctggtct cgggctccct ttctggggct gtcctccag gcggctccca ggtcctcatc cagggaagag cccagcctcg gccagaagcc accgcgcct </pre>	120 180 240 300 360 361
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattggggt aagggctgg gttcgaggc cgtctgtggc gccccagcc cctaagtctg cgagacgccg gccccgctt t  </pre> <pre> &lt;210&gt; 637 &lt;211&gt; 407 &lt;211&gt; 407 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <400> 637 ttttcatttt tcttacttt aatatctaag ataaaaaaaa aaacccaacc accaaaacaa cccatttgca tgtcggcgac acggtgtct cgggctccct tctgggct gcggctccaggcgctccaggcccccc	120 180 240 300 360 361 60 120 180 240
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 636 tttgcgcact gaacgttgct ttattcattg gttaattttc ctaacagcgt tgtaaaccca ggccgggatg tcctgagcgt tctggcagag gcccgtgcag cctcggcccc ttccggtccg cgctanctgg cctttgccct gagctccctc agcttcgcaa gatgagcttc ccagacgggg ccggggctgg gctctgaggg aaaggcgttc ccgcaggtct ggggccgcct tcccatgttc tctaaagccc agcacctgtg gttcgttggc ggggctcgtg ggattggggt aagggcttg gtttcgaggc cgtctgtggc gccccagcc cctaagtctg cgagacgccg gccccgctt t  &lt;210&gt; 637 &lt;211&gt; 407 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;4400&gt; 637 ttttcatttt tcttactttt aatatctaag ataaaaaaa aaacccaacc accaaaacaa cccatttgca tgtcggcgac acgctggtct cgggactcgt gccagaagcc gccggctc ccagttcca ggtcctcatc cagggaagag cccagcctcg gccagaagcc accgcgcct ccagttccgc accgtgacaa cctgggaccc agcctttcag aaaggccacc aggaactgtt tttaaaagcat agggctgcac taggaggaag ttttcccttg aggctgaag ttattcttg </pre>	120 180 240 300 360 361 60 120 180 240 300

<211> 371	
<211> 371 <212> DNA <213> Homo sapiens	
<400> 638 ttccgcaaca cacacaaaga ccggcatcag atttattatt atctcttgtt aaatattttc	60
gatcttttct cagaacatgg tctagaaggg catagtagtt tttttcccgg tacatgcgtg	120
ggtgggtagt gaggagaagg gagcagaggt gcgcgccagg agccaggctg gttctctgca	180
gagaacaacc tccagatcct cccagggaag cccgacacgc cagtcccacg ttggacgacg	240
tgcagaggaa gggggaggtc cacggggacg acgaagatga ccttatacgt gcactcggca	300
tatcctggag taacgcgcag tggggggggt ggggagggga	360
tgcccgctgc g	371
<210> 639 <211> 384 <212> DNA <213> Homo sapiens	
<400> 639 ttttttttt ttttcttaaa ttatatttat tatatgaaat acaaaatgtg gaaaatttgg	60
aaattacaga aaaaccaaag atgaaaatta cagtgacttt gttccaccat acaaagataa	120
ccactcaaca ttttttagta tgccttccgt cttttttatc tgctctacgt atacaagcat	180
acacccatat tttaaaaaac aaaattgaaa tcacataaca tgcactattt ttacaacctt	240
ttaatattca aggagcattt ttctttcagt cagatgttct tttacatgac ttttaatgtc	300
tgcgcggtac tccaccatct ggatggagat acaataattt acttaagcaa tcccctattg	360
caaactttcg ttacagcaga aaag	384
<210> 640 <211> 342 <212> DNA <213> Homo sapiens	
<400> 640 ggaataatgt ttatttaaag ttacatttca gaggaaacta tcttcaggag ggcatgaagc	60
ctatattggc tactgcaaaa caaccagaag ttttataaaa tatttctgat ttaaattact	120
aaggcactat agataggcac ctatattaca tacaatcttc aaacattttt aaaagttgaa	180
actatgtatt agttgatatc taaaatatta aagcccctga caaactgaac ggctaagaac	240
ttgacaaaat gagatgcctg tttcaatgat tctgttgcca gcatattaat taaaatacaa	300
tttgagattc taaattacac gatccagcct tagtccaggg ac	342
<210> 641 <211> 478 <212> DNA <213> Homo sapiens	
<400> 641 ttttggggtc agggtgcctt tattggtgaa tgggaatgtg tgggttggag ctcaatggcc	60
atatgtegge aegteeaggg tececaagge ageaggttee aaggeaetgg ggeageecae	120
gccgggggag gcccctgagc agcaggcacc attctcgccc tggcagggcc tgccacttgg	180
ggagagegga ggetggeeag geetteagea aagetgttge ageteaatea geteetettg	240
tgggacccgg aggctttctg ccggtagatc tcagcggtga agggctcttc gtataggaga	300
gccattatgt aggtgagggc caccagcacc gtcaggagta ggcccgtggg cgtggcgtgc	360
atgatggccc agccaggtag ttggctgtgc ttccccagta catggggttg tccaggatgt	420
tgaaggggaa cacggtcact ctcgcctcct tgaggatccc gaagtaatca cctaggaa	478
<210> 642 <211> 359 <212> DNA <213> Homo sapiens	
<400> 642 tttttttcac cgtgttcctg gagctgcccg ctgccctctg ccctgtccgt ccccggcaga	60
gactgggage eggeeeteag catgaceace gaaactttat ttacaacaeg aggetggagt	120
aagagggtg ggatggagga cagcagcagg gccgacagac cctacttctg ctcccgcctc	180

cagacgatga ccatgccgct					240
ctgacatcaa gcacaggtgc	actgtggccc	tgcagcttgt	tgacagcagc	cttggccgcc	300
cgctccacat caaagaagtg	cacgcacatg	tcctcactgc	ccgtcaccac	gcaggcccc	359
<210> 643 <211> 343 <212> DNA <213> Homo sapiens					
<400> 643 tttatttgtg aaacgataca	aattttatta	atatacaacg	ggaaatttga	cagtttaggg	60
aatcaggtac tcaatctttt					120
taatcacata gttatttgat					180
tgcagtgttc agggacatga					240
gaagttcaag agtccctcaa					300
gcctagggta ccaaagattt					343
	3333	J			
<210> 644 <211> 411 <212> DNA <213> Homo sapiens					
<400> 644 tttttttga cattttcaca	agatatatt	tcatttqcct	ttgcgactaa	tagateteta	60
gaacgttcca tcctggccgg					120
gcaggttttc ctttgtggca					180
aaatggggct cggtgttggg					240
actctgtgga cattcaaggg					300
tgaactctga aggttgagct					360
aaacgctgat ttttctggag					411
addegeegde eeeeeggdg	coagcoooc	ooogoogaag	350035	3	
<210> 645 <211> 398 <212> DNA <213> Homo sapiens					
<400> 645 tttttaatac tgctggcatt	tattttaaaa	ggtattgaga	tacaaaaatt	gtatcttatc	60
ttgtaaaaaa tatttattta					120
agacagaatc acaaaggtat					180
ttcacagatc ctgtgaataa					240
atatttagag ttttctggaa					300
tttgccattt cccttgtctt					360
agggccctct tctcccattg			cccaagcccg	3434343	398
agggeeece eeceeaceg	gegaaggeaa	caggeeea			935
<210> 646 <211> 494 <212> DNA <213> Homo sapiens					
<400> 646 tgaaacatga ttaattttaa	tgtttatcca	ccaqcaqaaa	aaatttaata	tgtaaatcca	60
ccagcagaaa aaaaattacc					120
acatttttca tagaaacaaa					180
atacaaggtc atttaccatt					240
tcatctttgt tcaacttttt					300
acaaaagaaa atatgtgacc					360
ttaaccctac atttactaca					420
ttacatttat ttttaaggcc	_	= =			480
attaaaggat tatt	Lococaagg				494
accadayyac cacc					
<210> 647 <211> 310					
7211/ 31/					

<212> DNA <213> Homo sapiens					
<213> Homo sapiens <400> 647					
cagttaagct attttttta	ataaattgaa	aagatgttct	gtacaacata	atagagtcat	60
aggaaatcaa aagcatatca					120
cagatatgac ctctcaatat					180
aatgatataa ataaaggata					240
tagttaaaaa gcataatcac	aagttacaaa	aactgtaatt	acaaattaca	aagaagaaca	300
ggcagacaat					310
<210> 648					
<pre>&lt;210&gt; 648 &lt;211&gt; 315 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 648 ttttttttt aaggaatgaa	ctttttaatg	tttttctgtt	tccattctaa	caaacatgca	60
tttttgcctt cagaaaatag	agtcaatagc	tgtgcagagt	tgaagaaaaa	cgtcctctgg	120
tgttccctct gcatttatct	tgtgtagctg	tgtttttgtc	tcgtagtagg	cgatcacggg	180
gatggacgct cggtagtagg	cttctaggcg	cttggcgatg	gtcttggtgg	tgtcgtccac	240
aggcaggctg ctccggctcc	ttttgagaag	gcggttggtc	atggtgtctg	ccgagcagtc	300
catacagatc accaa					315
-210 - 640					
<210> 649 <211> 415 <212> DNA					
<213> Homo sapiens					
<400> 649 ttttttttta tttcaaaact	atatatatga	gatttatttc	acattttcta	cctactcagt	60
catgtgagct gttgctacat	_	=			120
gatcatttac aatgtagaca					180
acagttggct tacagaaata					240
ccatttatgc ctacatcatg					300
atactatgac ccatgacatt					360
aaaaatatga catgttaaat					415
-		3	J		
<210> 650 <211> 315					
<212> DNA <213> Homo sapiens					
<400> 650			**		<b>CO</b>
ttttttttt ttttgcaaca					60 100
tctaaaaagt tgacattgta					120 180
catgttcatt gttaaggaaa					
gccatatctc acaaaatatg					240 300
gtttccattc tccaccctct	geettaagat	acgaagcett	gacatgacca	cateecagte	315
agcataagct ccttc					313
<210> 651 <211> 495					
<211> 493 <212> DNA <213> Homo sapiens					
<400> 651					
gcggccgcga cctcaaccga	agctttcccg	accagtttag	caccggcgaa	ccccccgccc	60
tggacgaggt gcccgaggtg					120
ttctggaaat ctgcatggtg					180
acataaggcc actggaatct					240
aaaagcttat gcttcaaacc					300
tgaagacgag actttcaaag					360
tggtatgcaa gattacaatt	atgtgtgggc	caactgtttt	gagatcacat	tagaactgtc	420

ttgttgcaag tacccacct	g cttcacagct	tcgacaggaa	tgggagaaca	atcgtgagtc	480
tttgatcaca ttgat					495
<pre>&lt;210&gt; 652 &lt;211&gt; 441 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 652 ttacaatagg aaatttaat	g aaattcatac	ttttaagcaa	tcatttcagt	aaaagaaatt	60
gttatagatg atgtgtatg	rt atgacgatag	attcagaact	ggttagagtt	gaatttcagc	120
attacatttt aaaggtatt	t gccaaaccct	aaagctcatt	ttatttcaag	tgaaaacatc	180
atcatgaaaa aagtcacgt	c acattgacta	acaaggttgg	taacaaatgt	aatgatcaac	240
tttatcattt aacatttca	c aagacttttt	attggtttct	aaaaagcagt	taatattta	300
aggtacggta tataaacaa	a atagccatat	ctgatttttg	gcaacatgaa	aatgccaatt	360
tcctttcaaa ccaattcc	g gactacagct	acaaatgtgg	tcaacaacgt	catcctggag	420
taaaattcag ctcctgaca	ac a				441
<210> 653 <211> 378 <212> DNA <213> Homo sapiens					
<400> 653 titttttttt tttttgg	xt catactacat	ttcactttat	tattattaac	atttatcata	60
catggttact attccaat					120
actttgataa ttttaacc					180
ttttacaaag gaaaaaaaa					240
aattttggat ttcatatg					300
accaatttga tattttgt		_			360
atatttttag gcaaaaag		J			378
<210> 654 <211> 308 <212> DNA <213> Homo sapiens					
<400> 654 ctaaatgctt taatttyy	a tanannatat	ttataastat	at ceat cost	tettetteea	60
aaaaggaggg ctagtsat		_			120
gaggtaacac tgtacttc					180
attagagaaa atgaataa					240
aagctagaca tatcamam					300
camwtycc	, generalian				308
<210> 655 <211> 325 <212> DNA <213> Homo sapiens					
<400> 655 gaataatctg tgctttaa	o qaaaaatqaa	acattaattt	gtttagtttc	tcatacaaca	60
tgtttactaa acatttca					120
ggrgctaata ccaattct	ag ccatgggrgt	atgttttggm	ctttytgaac	aattttgrgt	180
aaaatgaatg ycactgtc	t taaattgtac	ttggrgcaaa	gacaaagaaa	catcagctca	240
ttctttccaa ctaataga	ac atttaatgat	gcaattytha	ttacattatt	ccaaggctat	300
tatcataatg ttaaatat	c ttatt				325
<210> 656 <211> 320 <212> DNA <213> Homo sapiens					
<400> 656 attctcacct ctgattta	t tyttacttca	tataagatac	agtgtaattc	atttttactc	60

tctctagrgg tttctcccat ctaaacagta caaatctttt atggacagrg tactttaaaa atcaaagtgt cagagtctat gatttgtagt ttcatgtgaa aatactaagt attctggatt ccccaaggtt aaattatatt cagtataaty cbbggtaaaa tatattybgt atttbavgtt tttggraact gtttattcat atatggtgta catacataat aactaaaagc aggaatgtyt tattcatta agatgtatag  <210> 657 <211> 263 <212> DNA <213> Homo sapiens	120 180 240 300 320
<220> <221> misc feature <223> n=a,t,g or c  <400> 657 ggttagtaca caaatagttt atgcagtaaa taactgtggt tacagttcat tgttgtcagc aatacagcat tttccatcac aattataggt gaaacaaaac ctcatgaagt agtcatagca	60 120
cattcatgct agcgagagca tattacaaag caatgcacgt gcattatagg ggcagacaaa actggggaag ggctatattt ncactcacct ctggttaact ttgtgtattt tgtcattaag acttacatta tgtttgggtc aaa	180 240 263
<210> 658 <211> 180 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 658 cctactgtta gttttatttc agaagcagtg tgaagaggta catagctcgt gacatgttgc ttagactctc cttttctcag ctctgcaccc tgttatgtct ttagctcaaa aacagaaagc tctccctgct gtagctgaga ccaccctcct tccatcccct ccatcaagaa gctncccaaa	60 120 180
<210> 659 <211> 229 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 659 aaagaacaca tttgctgttt ttattggtgc cttgcatggc agtaatactg aaaanggaga atgcaaaaaa ataaaataaa ataaacaaaa aacaaaaacg aaaaacaggt tggtggcaac ccacatcttt tttttaagag cacataaact cctgttttat ttttattgtg gcatgaatga taacataaaa ccaaaancat gaaaatatac aacttatatt acactatgt</pre>	60 120 180 229
<210> 660 <211> 316 <212> DNA <213> Homo sapiens <400> 660	
gagtgctgta gagtttaatt gtaagacaaa agcactgcta cattatactt taaacataag tcatctttca gaaggaagga ttcagtgcaa attaaaaccc tatgaaagcc caactgtaaa tttcatatga agactctaga agtaaacttc tagaactgga aacacttggt tccaacagaa tttgcttggg gagaatatgt cttgaaaatg ttaaatggta cagagaacat catgtttaag tcaaccagat actaaaaaaa gacatgctga taggtcttaa tacataaaac taattgatta gtagtagcat gcttta	60 120 180 240 300 316
<210> 661 <211> 294 <212> DNA <213> Homo sapiens	

<220> <221> misc feature <223> n=a,t,g or c	
<400> 661 gcgaatctgt tgatttattt acggctcggt gagacgacgc tggacgctgg ttagggtaag	60
ggttagggca agcattagca gcaggggcat ggccctggga agcacctgga ccccagaaca	120
taagacagga gggagagatg ccatccattc agegggcact tatgeccaeg accagetgag	180
ccagaccage atteccattt caccaccet tactecteaa gatgeaaatn aageteaggg	240
ctgggcggaa gctggcaggg ctgtccacag ggaggacccc cgtgtgtctc tcgg	294
ccgggcggaa gccggcaggg ccgccacag ggaggacccc cgcgcgcccc ccgg	231
<210> 662 <211> 345 <212> DNA <213> Homo sapiens	
<400> 662 aagaggttaa ctcattgttt ttatttggta atcagaagaa catacaagta cttatgcatt	60
actagatgct gggggaaaat tatacattga aggactgtca ggctcatctg tgcaataaag	120
atttacaata aacacatcat taattttcct gagaacagct cagtatactc tgttttacat	180
gaatccttat gatttaatct tgtatttgga gatatgatgc tatggcattt ggataacatt	240
ggttaagcag catcttagag aacagaacac tcttcctcag aatggatggc cattctttta	300
ccctgtgatg tacaaatgca aattacaacc tgcattttat ctgcc	345
<210> 663 <211> 325 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 663 aagatatttt acttttttnc tttaatcagc acatttcttt tgataaatag tcatgagacg	60
tgttctgtga gtcactacaa ttctcacttg gcacttggaa cagtcgtgtt atataggttt	120
accataactc tcagaacagg agtatattac aaacaagtgg agtagaacat agagaataca	180
taatttgttc taatattcct cttccttaga gccttcaaac ttaaaccaag ttgaaaaaaa	240
aagtttccca aattgaaaac attgcctatg gattatctac agaagagagg aaaataagca	300
accattttga ttccacaaac caagc	325
<210> 664 <211> 215	
<212> DNA <213> Homo sapiens	
<400> 664	60
gactattcat gttttcaaac aagtctctat gtacagtaaa tatacataaa gttctaataa	120
acaacagtgc aatgcttccc aaagtcttaa gcactagtat cagattctta caacacagaa	180
accttttagt ttgccaaatg attggattaa ggatacagaa tatgtcaaat actcacttgt	215
ggctttccag gtcaccctct cccgccaaac aaaca	210
<210> 665 <211> 424 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 665 tttttttttn cactttttgc cgaacgaaat ttttacctca cgttcatctc accaaagtct	60
cttcagagga gcctggttta cagggtgatg aagctgatga tgatacagta gtgtacacac	120
tgctaacgtg aatcagactg gaaagcaagt cagtacttca gagtagcccc gcagaaaaag	180
agcgatacta agccttctta gtgtttcgtt tgttagtagt gatgaagaga aaactgcttg	240
agogacacta agoctocca gogotocgo ogotagoago gaogaagaaga addocgotog	

```
300
gaagcttcca tgggtcacta gttagggaca gagcagcaca ggtgatcaga cagggctgag
caaacacctg actgaccaac agaaccagtc tcctcaggca gcttacattg cagtcaatac
                                                                            360
agagggttat gggaatttat tgatttctgc ttggaaataa acaaggttaa ggcaaattag
                                                                            420
                                                                            424
ggag
       666
409
DNA
Homo sapiens
<210><211><212><213>
^{<400>} 666 ttttttttt catgaaatga catttattgt ttaaaaaagc gtgagtctgg aattagatag
                                                                             60
tggtgatggt tgaacaagtt tgtgaattta ctaaaaccac tcaattgtac gcttaaaaaa
                                                                            120
aaaagcaagc ttgagctgcc taagtcccgc tcacacacac tggacttgta ctaaatgctc
                                                                            180
aacgattcca ttctctcaga ctatggaaca ttctgtcaca tttttttcct tcaggagatt
                                                                            240
                                                                            300
tccctaaqaa gagctgtttg caaaatattg cacttaattt gaatccgggg gacctgatgt
ctcctggaag aaaacgtaca cttcacatgc cttcctgcct gcggcagaat gggcgggagt
                                                                            360
gggtggggac aaggggcttc aacagcagtt tccatggaac attgttttc
                                                                            409
       667
470
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
<\!\!400\!\!> 667 ttttttttaa tnagaagaat tactgggaac tagcttggca ctgttggaca cagtctttgt
                                                                             60
ctcagctact cgagaggctg aggcaggagg ttcgctcgag cccagcctgg gcaacatagc
                                                                            120
aagaccctat gtccgaagaa aaaaaaggca aaatcagaat taccagaact gatttcacat
                                                                            180
gtgtaggtag cagatggtgg ccatgcaatt caggtctgtc tgaaggcccc caggctgggt
                                                                            240
tacaaaactg tgtaaggcca gtacaaggcc ctgacaggtt cccaagtggc tggactngaa
                                                                            300
                                                                            360
qaqatgccaa gttcatggcc tcctaacctg actccaccca ggcactccct ggggcccagc
gacgttccct cctgaagcct tgaaatttca cctccacctn aggagggcca tctggctggg
                                                                            420
                                                                            470
ggattagggt ttttggcaaa aattgaaaaa cattcatttt tccagaggca
        668
350
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 668 aatgagggna agggaggcaa actggactag aggggctagg aggaggcaat gctgggaacc
                                                                             60
                                                                            120
aggtctcccc accacctgcg agtaatgtcg tgcaaatgaa aatgtgatac aagaactaat
ggggactaac tcctcagtaa aaaaagaaac acaggttgag agaagagtga tggaacaaaa
                                                                            180
agaaatggaa agggatagca gtatgtaatg atacgctaat taacatgctg ggacgntccc
                                                                            240
aaagaccttg ggattcttag ggaccaagtg ggggccagtc tcagagcctc ccaatgggnt
                                                                            300
                                                                            350
acaaaqqaaq qatqttaccc taagggaagc ctgggacagg tgcttgttgt
        669
461
DNA
Homo sapiens
        misc feature
n=a,t,g or c
^{<400>} 669 ttttttttt tatttaagt gcaaatatca taagggaaga ctgaacttct tttaggagta
                                                                             60
```

taggacaagc agcaaggagg tgg taaagtaaga ggaagaataa gcc ttttgagtaa tatgaaaagc cat cctacatttt caaaagctta ctc ggtggttgtt gcaaccatcc tgg agtgatggtg ctgatgacaa aag taaattgaaa ggacanctga ggg	egggtcac atagatctca eggaggg ttttgaagag etggctat tgtgtggaag gggacaga acgtggtggn gaagtcca gatttcagga	cagcaaagtt to aagagagaga co tagaagcaaa ac ctttgaagga ac tgttccnagg g	taggttttc 18 atgatctga 24 agtccctat 30 ggcagtggt 36	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
<pre>&lt;210&gt; 670 &lt;211&gt; 307 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>				
<pre>&lt;400&gt; 670 ttttttttac atgagatatt caa tnctcaactt taggtgttct gag gtaggttagg ggtattaagt gca aacgggaggt aaccccatcg taa gttctcaata aatataactc ttc acctcct</pre>	gcatgttt aaggtaggct attttcaa attaccatat agtgggag ggaacatcta	aggctaagcc a ttncaactta c gtgcctgggc a	tgatgttta 12 aatagtttc 18 cagaagccg 24	0 0 10
<210> 671 <211> 224 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c				
<pre>&lt;400&gt; 671 aaaaagctac ataatatgtt att attctgtatt tgcgagaaat tta gggtgatgaa agtattatgt ata aatcaacaga ntatacagca taa &lt;210&gt; 672 &lt;211&gt; 424 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	aaggagat gatgaaaatg aatattat aatggtaaat	ggtaaaaaat a atgtgatatg a	igatttaaaa 12	30
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 672 acatnattat atttgagaag atc</pre>	ctttctac gcagagactg	tgattgctta a	lactgtacac 6	50
aaacacctgg aagaaaaata aga gccacacagc tatatgcctg gca attcgtaaag ttctagatgt gta ttttaacagt gcttccagtt tcc tgtatgccat ggacacattt tat gcagggaggg gaaaactccc taa ggga	agatgtag tcaatcactt atcatgta aatgtccaga aggtgtca tgtagataag ctgtcacc attgagtgac tgtgtaac ccatgtgggc	gggaattttg c tccaggagcc c gattggttca t gctcatttta c aatcgcttca a	ectgcaagaa 12 atgagagaa 18 atcttccca 24 agtcagaac 30 agtcatttag 36	00 50 20
<210> 673 <211> 384 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c				

400 673	
<400> 673 gttaccaaga cacaatttta agatcaaaca agtgtcaagg taggccatgg cttgttggca	60
gtagtagggg ccctatggct atttccaggt atgggtggcc ccttttcctt ggttatctgg	120
ggaatctgcc acagcagaca gcaaaaggta aaaagcatcc ctttaataac tacaccccac	180
tccagcaatt gaggtttatt caggggtggg tcaaagtagt acaagacaaa aatagcttag	240
tgaaatggnt tagaatccag actgaggtgc cagactgcct gcatctgagg tctcaggtcc	300
caccatgtat ggaggccgtg tggaccttgg gggtgaggtt actaggcctc cccggggttt	360
caaatcttct tcacctgtaa aatg	384
<210> 674 <211> 332	
<pre>&lt;211&gt; 332 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 674 ggaagtgaga gtgtggtgaa ttaagtgatg agtattatgt acaattgcct ttacaaaaaa	60
cgtattttta ctgtggaaga aattcatgca gagatgcctg tggaaaagta tcaaaaaaaa	120
aaaaaaaaaa cctttaacac tatgacatac tgattataat atactatgat atgtattatt	180
acagcattac ttacacattc tactttaggg caatgtaatc tacttctgaa tgaccttgtt	240
aatttttaag ggcatcaggt ggcatcaagg ggcaaagctc cnttaaaata antattaaaa	300
acaggaaagg cttngctaat ttgtgggcct ag	332
<210> 675 <211> 494 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 675 tttcaaaaat aatataggag aagagagtgg gtgaggttat agaggaaaca agattggcca	60
tgagttgata accagtgagg ttgggtgagg tattttcatg aggtacatga aaatttattg	120
cactgctctg tctgtatttg tagagattat taaatttcca taacaaattt aaatgtagta	180
aaaacaagca agcaaattcc tggtttccca caatatgggt attgaaataa atttaaccct	240
aatcgaacca gtcacagtgg ctcacacgtg tagtaccagt tactcaggag gatcagctga	300
gcccagaagg ttgagaccag cctgggcaac atagctagat cctgtcaata aatacatggc	360
cgggcgcagt gcctccatgc ctatagtccc agcactttgg gaggcccgan gcaggcagat	420
cactgaggtc agaagttcaa gaccagcctg accacatggc tcgtgccgaa ttcttggcct	480
cgagggcnaa attn	494
<210> 676 <211> 464 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
<220>	
<221> misc feature <223> n=a,t,g or c	
400 676	
<400> 676 tctactcaaa ctataagctt ttattattgt attttacaga tcattcattc aggacatgct	60
gcatctgggg ttggcatcat ttcccttttg aatgacagaa tgtgcataaa agtctcttgc	120
ccacgctgaa ctcacacgtg cccggcagaa ggagctctca cgaaggccag ctggatgtga	180
gcttgctctg gcagcagcag tgctgtcctt gtttctgagc tgccacctat tcactggagt	240
taaggtgggt caaagctgaa atttagcttg gaatttaaag tttctaattt tatacttttc	300
attgtggtct ggtcagattt taagtctgct ttaaaatcaa aaggtcactc agtcactcta	360

attttngaat	atggaaattt	ggttatttac	atgctgtacc	tcaaatcaaa	420
cctcaatatc	acgcgtaggg	aaaaactagg	aaaa		464
sapiens					
feature t,g or c					
tggcgttttt	atctttttgt	attaaaaaag	tagtaacaga	cacaaatatc	60
atgccatcgn	agacgggtac	agctgagaac	gcctgggtcc	cacctgaggg	120
ggactccatg	gtccaccaac	ctccccact	ccagagcagc	taggggctgg	180
tcctgcttgg	gcctcaggtc	tcctcccatc	tgg		223
sapiens					
feature t,g or c					
acatctggta	aaacaaaatt	ttgcgtanat	ctaaatcaaa	acaaanaaca	60
					120
					180
					240
					300
taaacatcta	atttcaacat	ctctccaaga	acagacttct	tctcaataag	360
tt					372
o sapiens					
feature t,g or c					
agatatttat	tgtgttaaca	tgtgagacat	acaatttgct	cagtaaaaat	60
					120
tgctcaggac	tattaatttg	acaaggttgg	aatgtgcaca	gcaaagctgg	180
cattttaaca	ctgaatcact	ataccatgaa	ctgacaggac	cctgcatgaa	240
ctcatacccn	aaagtcnaag	gatccacacc	aggcagccat	gggaggggg	300
cctataatgg	atggctaanc	cggcatttta	attttccgga	agtggggggg	360
gccatggggg	gngtggaata	aatggggttg	gaagttccca	gggcccntaa	420
ancccttaag	ggtaaantta	aggttttaac	ctccatccaa	ttaaaaaagg	480
					489
o sapiens					
tcttqtcatt	tatgaaaaca	tgggtgaacc	cggtgcacat	tatgctgagt	60
					120
					180
					240
	sapiens feature t,g or c  tggcgtttt atgccatcgn ggactccatg tcctgcttgg sapiens feature t,g or c  acatctggta ttctcagtt atgagatatt atgtgcaaaa ttatatata taaacatcta tt sapiens feature t,g or c  acatctggta ttctcagt atgagatatt atgtgcaaaa ttatatata taaacatcta tt sapiens feature cagacatcta tcagacacacaccacacacacacacacacacacacacaca	sapiens  feature t,g or c  tggcgtttt atcttttgt atgccatcgn agacgggtac ggactccatg gtccaccaac tcctgcttgg gcctcaggtc  sapiens feature t,g or c  acatctggta aaacaaaatt ttctcagtt aaaatagttt atgagatatt aggtagactt atgtgcaaaa ttgtaaaatg ttatatata aagatgttt taaacatcta atttcaacat tt  sapiens feature t,g or c  agatattat tgtgttaaca aaaatattat tgctcaggac tattaattg catttaaca ctgaatcact ctcataccn aaagtcnaag cctataatgg gngtggaata ancccttaag ggtaaantta  sapiens tcttgtcatt tatgaaaaca aggcacagaa agacaaacac cttatacaag taaaggtca	sapiens  feature t,g or c  tggcgtttt atcttttgt attaaaaaag atgccatcgn agacgggtac ggccccact tcctgcttgg gcctcaggtc tcctccatc  sapiens  feature t,g or c  sapiens  feature t,g or c  acatctggta aaacaaaatt ttgcgtanat tttctcagtt aaatagttt aataaaagca atgagatatt aggtagactt ataaaacaaa atgtgcaaaa ttgtaaaatg ccaatgtgtc ttatatata aagatgttt taaagtgcca tcctgcagac tattcaacat ctctccaaga  tt  sapiens  feature t,g or c  agatatttat tgtgttaaca tgtgagacat aaaatattat aagcttatat tcataaagaa tgccaggac tattaatttg acaaggttgg catttaaca ctgaatcact ataccatgaa ccataaccn aaagtcnaag gatccacacc cctataatgg gngtgaata aatggggttg ancccttaag ggtaaantta aggttttaac sapiens  sapiens  sapiens  tcttgtcatt tatgaaaaca tgggtgaacc aggcacagaa agacaaacac tgcatgatct cttatacaag taaaggtca aatgctggtt	sapiens  feature t,g or c  tggcgtttt atcttttgt attaaaaaag tagtaacaga agacggtac agctgagaac gcctgggtcc ccagactcatg gccaccaac tcctcccatc tgg  sapiens  feature t,g or c  tggcgttttt atcttttgt attaaaaaag tagtaacaga gcctgggtcc ccagactcatg gccaccaac tcctcccatc tgg  sapiens  feature t,g or c  acatctggta aaacaaaatt ttgcgtanat ctaaatcaaa acaatctgt atgagatatt aggtagactt ataaaacaaa gcaaaacgt ttgtaaaatg ccaatgtgtc ttgagaaaatg ttgtaaaatg ccaatgtgtc ttgagaaaatg ttgtaaaatg ccaatgtgtc ttgagaaaatg tttaatata aagtttt taaagtgcca cagcttaagg acagacttct  sapiens  feature t,g or c  acatctggta aaacaaaatt ttgcgtanat ctaaatcaaa acaaacggt gtaagttat tggagaaaa ccaatctgt tcttatatata aagtttt taaagtgcca cagcttaagg acagacttct  tt  sapiens  feature t,g or c  agatatttat tgtgttaaca tgtgagacat acaatttgct aaaaatatta aagcttatat tcataaagaa atgggtatgt tataatttg acaaggttgg acagcacatttaaca ctgaatcact ataccatgaa ctgacaggac cattttaaca ctgaatcact ataccatgaa ctgacaggac cattaattgg gccatgggg gngtggaata aatggggttg gaagtcccaa acctataatgg ggtaaantta aggtttaac cggcatttta aggcatggg gngtggaata aatggggttg gaagttccca gccatggggg gngtggaata aatggggttg gaagttccca ctccatcaa ggtaaantta aggtttaac cggcatttta aggcacagaa ggcaaacac tgcatgggt gaagttccca ctccatcaa ggtaaantta aggtttaac cggtgacact cacttccaa aggcacagaa agacaaacac tgcatggtc cggtgcacat cacttacaag aagacaacac tgcatggtc cacttacatg ataaaggcacaa aggcacacac ctccatccaa ctccatacaa aggcacagaa agacaaacac tgcatggtc cacttacatg ataaaggcacagaa agacaaacac tgcatggtc cacttacatg cttatacaag taaaggcaca aatgctggtt accattacatg cttatacaag taaagagca aatgctggtt aaccattgagct	tggcgtttt atcttttgt attaaaaaag tagtaacaga cacaaatatc agccatcgn agacgggtac agctgagaac gcctgggtcc cacctgaggg tcctgcttgg gcctcaggtc tcctccatc tgg  sapiens  feature t,g or c  acatctggta aaacaaaatt ttgcgtanat ctaaatcaaa acaaanaaca tttctcagtt aaatagttt atgtgaacat aggagatat aggtagatt atttttgattt atgtgcaaaa ttgtaaaatg ccaatgtgt taaaacaacg gtaaagatc tttaatata aagatgttt taaaacatcta atttcaacat ctccaaga ctgcaagac ttccaagac acaatattt tggttaaca tgtgagacat acaatttgt taaaacatcta atttcaacat ctccaaga acaagacttct tccaagta ttgtgagacat acaatttgc cagcttaagg cttaatattt tgtgttaaca tgtgagacat acaagacttct tccaataacg tccaacacac aggacagcac cagcaagacgcact acaatatta tccaagacaccacacacacacacacacacacacacacaca

```
300
cttqtacaqc atgqtgacta tagttaacaa caacgtattg tattcttgaa aaaaaggagt
gatatagggg taccagagat gggcaggatg attgaagatc acagtccagc cttgcaggac
                                                                         360
cccgggggac agggcggca ctcagaggtt ggacctccag caggtagcgc aggcgacact
                                                                         420
ggctctcctg gtagatgagg tactcgctct gggagaatgt tgagctgctg aaactctgg
                                                                         479
       681
446
DNA
Homo sapiens
<400> 681
ttaaccagaa aagaatotot ttaatatott gtagoogtaa gaotgataca actgaaaaca
                                                                          60
                                                                         120
taaccctaaa tttgattctg caggttgcag ttacaacaca agttgaagtc acagccttgc
                                                                         180
eggaactett atgtaaagtt tagggeattg gatetggaag gagtgggace etgagaateg
taaagggata tttgggtgga cttgagcaaa tccaagaacc ctgaactgag gaagagcagt
                                                                         240
gtgagtacat ggtcaggggc tccatgaata ttcctgcctg caaccccagc ttcacaggca
                                                                         300
                                                                         360
attcagcctt ctccacactg gcccggcact ggctagctgc tcaccttatg gctcgaggca
                                                                         420
qqacccccc gcagccttac agctggagtg ggaagttgct ggaagttgta tctgtttatt
                                                                         446
gcttttaagg ctgtcatgag cagaca
       682
566
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 682
ttaaaatgtt cttttttggt cagtagtctt agtaagagat ttatatgaaa agaggtagga
                                                                           60
qtatataaat agggtgttaa atatatcatg tcaccaaaaa atttacccga gaaatagaag
                                                                         120
tttaaaagca attttaaaaa accttcaatc aacaatatat aaataactta atctgaggta
                                                                         180
agagggaaaa atgccctgca aacactttag aaaaacacat ctctgccaca ctacagaaat
                                                                         240
agacctttac cacatcttct ggaatcccca gttccctcca tctaccaaag attttgggca
                                                                         300
ccagaactaa agattgagaa tctctcccac ccctaccact tccaggtaaa cacaaagttc
                                                                         360
                                                                         420
atgttcagcc agggctaaag taccaagaaa actggaccca ctctccatcc caccccatcc
taggataggt ggggccaggg cagaaatcat ggaatgctca ggactccanc cctcccaagt
                                                                         480
gcactgaggg aaggttctgg aactggggct tcctcccaac aaggcantca cctcctctgg
                                                                         540
ggagttcatt cacctcctct cccttc
                                                                         566
       683
438
DNA
       Homo sapiens
<400> 683 qattaactat gtgactaaat tatattcaaa ttttatgaac agaaaatgat ataaatgtta
                                                                           60
                                                                         120
tcagctaata aagagattat caaagagtaa gcaaccaaaa caagtaggca aaaagcatca
gagagtaatt aatacaaaga tgatgttgtt tttctggatt tcataatgtt tatcatagtt
                                                                         180
                                                                         240
gtcaactttt ctcattcaaa aaaaccctta tttttatacc taattttaat taaaaatttt
tcaqtttqta ttaaaqaqqa ctccccaaat tatatgagtt tccaacttca taaaacctaa
                                                                         300
atctgtcttt gttcatatca gataaaaata ggccacacag actgccaagt aggtacagtc
                                                                         360
ttggaactgt ctgtggtgct ggacccaagg ttcacttggg ctctctccat gggtacttac
                                                                         420
                                                                         438
tggcccaagc caaagctg
       684
382
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
```

cegagtgaaa acagtetgtt tattacageg tetagaggtg gggatgcaga atgaggeggt 600 geecagagga aggggegeet cageccaggg negnacegtg acaatgegeg caatecaaat 1200 acagtteace eggaagacae ggeagagete ecaegttaca aaggetgaca eagaceagea 1800 gegtgttgtg ttgggagggg ggtetgacea egatggegag ggeagtegge ggggggtggg 2400 gggcetgetg accaetgaae agaetgaceg eateetgggg geaagataaa ttaaggggga 3000 agtettaaat aagteaetgt gegtgeetea tgggeeegag gagggggtat eetaagtttt 3600 agggtteet ateaatteet ga 3820	0
gcccagagga aggggcgcct cagcccaggg ncgnaccgtg acaatgcgcg caatccaaat 120 acagttcacc cggaagacac ggcagagctc ccacgttaca aaggctgaca cagaccagca 180 gcgtgttgtg ttgggagggg ggtctgacca cgatggcgag ggcagtcggc ggggggtggg 240 gggcctgctg accactgaac agactgaccg catcctgggg gcaagataaa ttaaggggga agtcttaaat aagtcactgt gcgtgcctca tgggcccgag gagggggtat cctaagtttt 360	0
acagttcacc cggaagacac ggcagagctc ccacgttaca aaggctgaca cagaccagca 180 gcgtgttgtg ttgggagggg ggtctgacca cgatggcgag ggcagtcggc ggggggtggg 240 gggcctgctg accactgaac agactgaccg catcctgggg gcaagataaa ttaaggggga 300 agtcttaaat aagtcactgt gcgtgcctca tgggcccgag gagggggtat cctaagtttt 360	0
gcgtgttgtg ttgggagggg ggtctgacca cgatggcgag ggcagtcggc ggggggtggg 240 gggcctgctg accactgaac agactgaccg catcctgggg gcaagataaa ttaaggggga 300 agtcttaaat aagtcactgt gcgtgcctca tgggcccgag gagggggtat cctaagtttt 360	0
gggcctgctg accactgaac agactgaccg catcctgggg gcaagataaa ttaaggggga 300 agtcttaaat aagtcactgt gcgtgcctca tgggcccgag gagggggtat cctaagtttt 360	0
agtcttaaat aagtcactgt gcgtgcctca tgggcccgag gagggggtat cctaagtttt 360	
	2
555	
<210> 685 <211> 400	
<210> 685 <211> 400 <212> DNA <213> Homo sapiens	
<220>	
<221> misc feature <223> n=a,t,g or c	
.400	
<400> 685 gagtgtaaat tcaattttag cagattaggt tttattttaa ctgcatcggg aaaaccacat 60	0
agataaaact atcttattgt ttatccttta caatttttta aagcaaaaca aacacaacag 120	0
cattttattt atttaattgt agtgcatccg tattttcaca tattggattt taaaaaatct 180	0
ctgcttacaa gaagaaacga aagcccaaac aagaatgtag tatgtaagcg agtacaaaat 240	0
gagatagagt agaaggcaaa ctgattacct aagtcccaag aagtcaggaa acaaagtgta 300	0
actcagatcc aagcagggtt aaccaggaaa ggctggcatt tcggtgngta ccnggctngc 360	0
tttcttcagc aactgcgctg ntacaacatt cctgggggca 400	0
2210	
<210> 686 <211> 230 <212> DNA	
<213> Homo sapiens	
<400> 686 cagtagagag tettattea tteetteatg tgacagttgg cettgagtag ttacaaagae 60	0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagae 60	
dagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagae 60 agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte 120	0
dagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagae 60 agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte 120 ecaceagetg etaceetgga agetteaggg agatggggag cetggagtag gggggtgetg 180	0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagae agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ceaccagetg etaccetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaacece eggeaggeag tggggecagg etteacagge acceaggget 230	0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaceagetg etaceetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaaceee eggeaggeag tggggeeagg etteacagge acceaggget 230 <210 > 687 /211 > 434	0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagae agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ceaccagetg etaccetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaacece eggeaggeag tggggecagg etteacagge acceaggget 230	0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaccagetg etaccetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaacece eggeaggeag tggggecagg etteacagge acceaggget 230 <210> 687 <211> 434 <212> DNA <213> Homo sapiens <400> 687	0 0 0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaecagetg etaceetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaaceee eggeaggeag tggggeeagg etteacagge acceaggget 230	0 0 0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaceagetg etaceetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaaceee eggeaggeag tggggeeagg etteacagge acceaggget 230	0 0 0 0 0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaccagetg etaccetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaacece eggeaggeag tggggecagg etteacagge acceaggget 230	0 0 0 0 0 0
cagtaaaaac tetttattea tteetteatg tgacagttgg cettgagtag ttacaaagac agageagtte etgeetetea gaattetaag cagacattee agageteaca gateagtgte ecaecagetg etaceetgga agetteaggg agatggggag cetggagtag gggggtgetg caggaaceee eggeaggeag tggggeeagg etteacagge acceaggget 230	0 0 0 0 0 0 0
agagcagtte etgeetetea gaattetaag eagacattee agageteaca gateagtgte ecaceagetg etaceetgga agetteaggg agatggggag eetggagtag gggggtgetg eaggaaceee eggeaggeag tggggeeagg etteacagge acceaggget 230 (210) 687 (211) 434 (212) DNA (213) Homo sapiens (400) 687 ttttttttt ttttgeeatt agaaatgett ttatttataa aagaactaet taaatataaa eateetetaca tagaaacaet etteacaaaa ggaetettge attaetgeet tetgaecaeg accageagae actgtggatg taaggaetee acggtgtete eegacteeca ggatttaag getaaatgtg eacttggagg aacaggget gtaaggetat ttetteeett tetttaaaa 240 gacaaattte atggtteee attecaagat aggetteata getggggaag atettaagat 300 gacaaattee attecaagat aggetteata getggggaagat atettaagat 300 gacaaattee attecaagat aggetteata getggggaaga atettaagat 300 gacaaattee attecaagat aggetteata getgggaagat atettaagat 300 gacaaattee attecaagat aggetgaagatee attecaagat aggetgaagatee attecaagat 300 gacaaattee attecaagat aggetgaagatee attecaagatee attecaagatee attecaagatee attecaagatee attecaagatee attecaagatee attecaagatee att	0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgtc ccaccagctg ctaccctgga agcttcaggg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230 (210) 687 (211) 434 (212) DNA (213) Homo sapiens (400) 687 ttttttttt ttttgccatt agaaatgctt ttatttataa aagaactact taaatataaa catctctaca tagaaacact cttcacaaaa ggactcttgc attactgcct tctgaccacg accagcagac actgtggatg taaggactcc acggtgtctc ccgactccca ggattttaag gctaaatgtg cacttggagg aacaggggct gtaaggctat ttcttccctt tctttaaaa 240 gacaaatttc atggttccc attccaagat aggcttcata gctggggaag atcttaagat 300 tcttggtcta aggggtaagc aaatatcttc ctgagactgg gaggtatgat caggcacttg 360 aagggtata aggggtaagc aaatatcttc ctgagactgg gaggtatgat caggcacttg 360 aaggggtatgat cagggacttg agggatatgat caggcacttg 360 aaggggtatgat cagggacttg 360 aaggggtatgat cagggacttg 360 aaggggtatgat cagggacttg 360 aaggggtatgat cagggacttg 360 aaggggaagcacttg 360 aaggggatatgat caggcacttg 360 aagggatatgat 360 aaggatgatgat 360 aaggatgatgatgat 360 aaggatgatgat 360 aaggatgatgatgat 360 aaggatgatgatgat 360 aaggatgatgat 360 aaggatgatgatgatgatgatgatgatgatgatgatgatg	0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcaggg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230 caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230 cc210	0 0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcagg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct ctaccaggcaggcagg tggggccagg cttcacaggc acccagggct caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct caggaaccact tagaaacacc cttcacaaaa ggactcttgc attactgcct tctgaccacg accagcagac actgtggatg taaggactcc acggtgtctc ccgactccca ggattttaag gctaaatgtg cacttggagg aacaggggct gtaaggctat ttcttccctt tctttaaaa caggacaatttc atggtttccc attccaagat aggcttcata gctggggaag atcttaagat tcttggtcta aggggtaagc aaatatcttc ctgagactgg gaggtatgat caggcacttg ggaatctggc tttgaatgtc atctctgaag catggaagtt agtggtgaaa aaaatcttat ttccaagtct agga 434	0 0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agettcaggg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230	0 0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcaggg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230	0 0 0 0 0 0 0 0 0
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgtc ccaccagctg ctaccctgga agcttcaggg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230	0 0 0 0 0 0 0 4
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcagg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230    <210 > 687	0 0 0 0 0 0 0 4
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcagg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 236 <pre> &lt;210&gt; 687 &lt;211&gt; 434 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;400&gt; 687 tttttttttt ttttgccatt agaaatgctt ttattataa aagaactact taaatataaa caatcaatgcaaatgcgcag accaggagcag accaggagcag accaggagcag accaggagcag accaggagcag accagagagag</pre>	0 0 0 0 0 0 0 4
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgc ccaccagctg ctaccctgga agcttcagg agatggggag cctggagtag gggggtgctg caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct 230    <210 > 687	0 0 0 0 0 0 0 4

ttagcttgac aacagtttaa aactgatggt cccagttaaa tctgtacaac tgtatgagaa aatgaaaagc ttcgagttat cagtgtacga gagattttaa actactttat ctctgtcaga aattcaaaac taaacaacct ccaaagtctg ttttcctctt acctttcaga accatttcat ggaaaatcta accagttttg ctcgttatta tca	300 360 420 453
<210> 689 <211> 519 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 689 gaaacaacaa cagtgtaatc tttaacaggg atgttaaagg taagaagtca ggaagataaa	60
ccaaaatgat tgagtatgat aaagaatttt gcatggcgat taaaatagaa aacctataaa	120
tgtagaaaaa gcaggtctgg acttagcaaa gaaacaatat agtttggaga aggcatgaaa	180
taagttettt teatgtteae tgetggteae ancataaeag agagtgatgt ggagagettt	240
gggaaggttt cacgttgagt tacatcagtg gtcaacaatg gagcaacaag actccgtaga	300
ggatgccacc ctgggagaat tgcaagggaa aggaggctga agcacaactg gtaatagcct	360
tcagatattt aatggatatg caaataaagc tctgattaat tgtattttca cttattatat	420
atcatctttg gacctttcta aaagtgggac nctagaaaag atatactgaa actccaaaag	480
aatacttcag ctcgagttga atggattcaa gatgttgtt	519
<210> 690 <211> 462 <212> DNA <213> Homo sapiens <400> 690	
ccgtgaagga actattatta ctttaaaagt gagggtaatt tacatatggg gtgtatatat	60
tctaaaaata gtaataaaag taccttttat aagcaatgtt gtgtggcttg tagaagaaag	120
cagggaggaa aaaaaggcag gcaaaactag tctaggtcta ggccctaaaa atgagcttcc	180
ttcccacttg actggaaacg cccatgtgat ttctaggctg aaaataggta ggatttaacg	240
agtaacctag ttcccttctg tctctgattt ctgatcagct gatggagctg ctagtaagag	300
gggccgatca tgctcccaga cgagtccttt ggcctcttgc tctccatccc aagcctgact	360
ccttcagcag cagccccctc cttctgtgtc catctgatgc aggcaagcag gagcagtaag	420
agggcatccc atgttccagt tcaccttcta tggggtgact ag	462
<210> 691 <211> 202 <212> DNA <213> Homo sapiens <400> 691	
tacagaacaa acgtgttctt tactgtgaag ttcattatga acctgaatcc ctgatcattt	60
aaagcctatt atccaactta tgcctcaagc agcaacattt ttgtgttcaa caatttaact	120
tactacacac accttgtgca aaatcacaaa ccttctcata catttatgag cttcagaatg	180
taactgggaa gtgtagcaca gc	202
<210> 692 <211> 417 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 692 aactattett gttttatatt ttattataet ggaacagete gtgteetetg tetettgeet	60
cggtgcctgg gtggcttgcg cccacnatct cccccctttt tattaactag aatcgccatc	120
gccatcattg cttgttgttg acttcggact tggtttcgga ctccttagag gcatctgcag	180
J	

```
240
actaaaagga gacaacataa gcataccaat attaataatg ccagtaacaa caatgatcct
ctgacgggtt tgagccattt gaagggatta aaatcagggt aattgtttag ttatgccttc
                                                                        300
aaaaatgtgt gagccaggga actgtgggat aaatggggct tgtgaagcct ccaaagattt
                                                                        360
qctctttaaq qttgtggaaa tatcccaagg gttaaggtta tcatcccngg ggttttt
                                                                        417
       693
381
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 693
tactgaaata cacagattca cttcagctca gcgtttactg agcatctgcc atagggcact
                                                                         60
gtngcttgga gctgggattt aaacagctcc agtccctggc ctgcacagaa agtgaaggcc
                                                                        120
agtggggaca ggcatgtaag cccgtagcag cagcacaccc ggccacagcg gccaagtgca
                                                                        180
                                                                        240
gcaagtactc acagaattcc agggcgatgc caagaggctt tcagaggggc caacctgtga
                                                                        300
qccagaactt tgaagggacc aacggatttc cccagatggg acaaggaaca gaatgggtgt
tattacccaa ggcaagatta aagtgttatt gggaaggttn acagagggcc agccaacatt
                                                                        360
                                                                        381
tggggcacac cacaggggca a
       694
449
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 694
tctanagaca aggtctcact atattgccca tgctggtctc aaattcctgg gctcaagcaa
                                                                         60
gccttatgct gtggcctccc aaagttctgg gattacaggc atgagcactg cacctggctg
                                                                        120
180
tttqttacta gtgcttttgg tgtcaaatct aacaatccat tgtcaaatct gaggaaatgc
                                                                        240
agatctactt ctatgtttgc ttctaagaat tttgcaatct taccccttac attgaggncc
                                                                        300
                                                                        360
ttgatccatg agttaattat tatatatgag ttaattattt tatatggggg tcccacttca
                                                                        420
ttttttttta ccatggccat tatacaaatg ttccaggnat ggatttgttg aaggggacnc
                                                                        449
cttctttccc ccattgaatg gggcggggg
       695
428
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 695 ttttttttt ttcaagttgc tttttccctt tttattaaaa atagactcaa gcactttant
                                                                         60
qtatcataca aaagtttcat tcgctggtgg cagccacggg aaagactggc cccgtagcac
                                                                        120
tgattttcca cctcccctcc agggacttgg gtcccaggag cagtgactgg gcctcagaga
                                                                        180
aagcccataa agactgctta ctctggaagc agccgactag gggctnttcc gcgagcagct
                                                                        240
                                                                        300
ntccccaccc cacccaatgg caaaagttag atactcgaaa gtgcctcttc agtgccaaga
taaactaaca agtgggagtg aaatgggaaa accctttgat tattttacta ttttcccagg
                                                                        360
                                                                        420
ggcctggggg nttttnagtt tttccctgca attcaaagtc cttttttccc ttacaatagg
                                                                        428
ggggtagg
       696
341
DNA
Homo sapiens
```

<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 696 ttttttttc acactttgtg gttattcttt tattcttggg tgtccccac cagaccccag ctgactgggc agggattggc cccaggnttg gcacangtgc caanncaccc gagtgctcag ccacctcttg ccaaacatct gaatcaatgt cacagcaaca cttggtttgc tcctgttgca ttctcatgac aggctcagcg tcaggtacga cgttcttgag ggcaaggctg tcctccacaa agccctctgg ggttgggggg tntccagagg caagccctca gctctnggga gacttgtctt gccttccggg aggaaacttg gggggcaaaa gggacaaagg g</pre> <210> 697 <211> 560 <211> DNA <211> Homo sapiens	60 120 180 240 300 341
<213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
ttttttttt tyacttete agatttattg tatgteetea gacangtaga taaaaatgea tggggtttae tteeagggat ttacagacea atataagtaa acagetgggg tttettttta ggetgttet ettggaggtg gtgeaggagg ttgaggaaag eacetetgat gageagatag etggaggetg tteeeacagt eatgteteag egaagaagte ggagtteage ageeateaga aceaaggtat gtgtggtgat etteggaatg eeacteeaaa teetttgeae tttetttne acacageagg agttntaaaa gantgettee ttttattatt aacaetgaga ateeatgeag agagtttaea etaaacaet gantacattg tgtttttagg aaggetgggt neeeteagte eecagatett tgaattetae eattaagtte aggtaggtt ttngagacag agntttgeee geateatate tgtgacaetg acetetetgg gtntagggtt tteetttggee aggggtteet tgagtteagn eectgateat	60 120 180 240 300 360 420 480 540
<210> 698 <211> 356 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 698 ttttttttg aattaagtat ttcatgttt tattcaaaa gaaaaaagga taccaagaag cagaagaatg aagcagttaa aaccagcaaa gctgcaaagt aggaaagaaa gctgagggag agattgatcc gatttcaacg atgtggccac ttaatgcaaa cacaggggtc tgatgctgca aacctaagtt cacatgagtc cagtgacttc agcaggtcca ctggatccnc cacagtgaca gggccagggc ccttcctgct gaatcctaac tttacacatt ctaggncaca tgtcatggca catacagggt tacactttat gggttacatg gacattggca tgccatttgc acacag</pre>	60 120 180 240 300 356
<210> 699 <211> 377 <212> DNA <213> Homo sapiens <400> 699 ttttttttt ttcctagata caattccttt attatcatta tcatgccccc tagcacatga agctgggctt ccacctagat cagctaagga caggggtatg tttacaatga gaacaatttc	60 120
tctatgcgca ttaggttaag acctcttctc tgtttctaga atactgtgat gactcacatc catgggccag ctgcttccag ggaatccatc tggcctcaac aacattgggc tgcctgggaa taacggtctg ggcacttgca caggggcagg ggtatggggg agcaggcctc aggtttatta aggcagggac tggggcactg ctggaaatag ggggaagggg gggcagccaa catgttagcc aggttcttcc ccaaggg	180 240 300 360 377

```
700
426
DNA
Homo sapiens
^{<\!400>} 700 ttttttttt caccttattg catttttaaa atctttattc tgtagtgaat tggtattccc
                                                                            60
                                                                           120
aatctgccta agcaaaggca tgcccttcta acaagatttg cttagagcag aggtgataga
aggaagaatc cgaagaccct ctggcatggc aatctgggag cagcacattg ttgatggagt
                                                                           180
                                                                           240
ccaaqtqaqc acatttcaca caattcattt agtgacaagt gggcttgctc ccttttcatc
caggaaaaaa actactcaca gaccactgcc cagaatctgg aataagaacc ctcattttaa
                                                                           300
ggtattcttc ccaacaaata aatatctaaa tattgaaagg gggcatatca ggaaaactta
                                                                           360
aaaggacaca tttaaccaaa accaaaaccc tttttcaaaa caagtaaggc atgtctgtat
                                                                           420
                                                                           426
ttaqtt
       701
367
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 701 tttnttccaa aaatcaccac ctttaatact ccccggtcct gcacacaccc acagtctcac
                                                                            60
tgggctccac cctcacttac tgcccgccgt ggatggcctt ggaggctgcc tgcccgcgcc
                                                                           120
aggatgtttg gcacaaagag cagccccgaa gcccnctnaa tgntctcgat gggcaccagg
                                                                           180
                                                                           240
taagcgntcc agtgggatgg cctnatccac aggtgcgttg ggcatcacgt aggtgcggan
                                                                           300
tncaatttqc ccanctqntn cctccaggtt cagcaccttg aagaagtttg tgggcactgc
                                                                           360
cangtggttt ttgccgatga cctgggtant ttacgtagga tttcccatca gnctctgtcc
                                                                           367
atgggac
        Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 702 ttttttttt ttgtttaac ttcgttttgt tttattttac attgttttag gagcttacac
                                                                            60
                                                                           120
aatcagttct cccttgaatt taaggataaa acttgtcttg tttataggaa aattggtctc
                                                                           180
attqqataaq atcaaaacaa atcctatata tttttgtcct agctgtcagg atgttcagac
ctaacttagg cattcaacta tattaatact tcccagatgt cagccacatt catttgcctg
                                                                           240
                                                                           300
ttatttttta aaattatatt aaaattatgg cggtaaataa aaatgtactc acattctcat
catgggacga tgggttacgg gtttaggctt gtaggctagg tggaaaggcc aaatttggtg
                                                                           360
qqaaaaqqta ttqqccnttt atggggnggc ctggtttcta actaggcctt tggccaattt
                                                                           420
                                                                           424
tttt
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 703 ttttttttg tatacggtaa ctactttatt attttcaaat gcaaactctt tgcatttagt
                                                                            60
ttgctatttt acaattttac aaactaggta taaaagacca taaataaatg acataagtta
                                                                           120
tgtgtaccta aagttcatga agggaagaaa aataccttga caaattaaaa caaaatagga
                                                                           180
```

aaatctatgt ctaactccag aaatcactca aattttggga acgtgtgaac cgaacaatgt tctgttaatt tctttttcag tatggaacta aattataata tggccttata cattctnatt tggaccacag tccttggcat atttccacnt acttggggg	240 300 339
<210> 704 <211> 302 <212> DNA	333
<213> Homo sapiens <220> <221> misc feature	
<223> n=a,t,g or c	
<400> 704 ttttttttaa cctttatata cagatatatt tatagaataa gctatattaa tttgtctctc	60
ctttttacag caatattagt ttgggatctt tcatacatta agtacaaaaa aagtctgggg	120
agaatggcac gtaagagagt gcatgagggt ctgtggggcc cngctgctcg ctactgattg	180
catatggggt cgcccaggnc cctgggaggg acangcccgc gcacttntct ggcagggtct	240
ngggatggag tnggggtcgg tctnagccna acggggctga ggggggtngc tcanaccccc	300
ca	302
<210> 705 <211> 413 <212> DNA <213> Homo sapiens	
<400 \ 705	60
ggttgtcátt tattgttttc aacactatct tcatgacctg tttgtgttca gagtggctca	120
cagataagga aacatttttg cccagtctta agttcatgga agataatagg aagagtaatt	180
aactgcagca aaaggttagg acaaaacatg gcattatcag ggcttgaaag gactttattg tggctgtggt gaagcaggcc ctgggtcttg gcagatgata ccagaagggc actgagtgca	240
	300
ggcgtgcaac ttgaatttga tcccataaag tcagggcatc aggaagccat tcagaatttt	360
tcaccctgtc agatgctcag atttgctagg agaactctgg gtagtgggca agaaccagag ctgttacttc aggaattggg gacagagggc atttttcccc aaaaaaaaaa	413
ctyttattte aggaattggg gaeagaggge attitione aaaaaaaaaa aag	
<210> 706 <211> 454 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 706 tagtagagac agggtttcgc caagttggcc aggctggtct tgaactcctg acctcaggtg	60
atccgcccgc ctcagcctcc caaagtgctg ggattacagg cgtgacacat gtgcccggcc	120
ccccttaaaa ctctttaatg gtgtctcatt gcttacacat tacagttcaa gctcccaaac	180
acggaacaca cgactccttc ctcctgttcc taagaactta aaatggnagt ctcaattctt	240
accacttcct gcctcgccta tgatacacca ggcaacacca gattgcttgt aattcttgac	300
aaacacataa cacagcttgt tctacctctg ggtgtttgtt cacaggtacc cactctgtcg	360
ggnactgcca taaccctcat tnttattcct taaattcaaa ttggcatttc agntcactan	420
tttttttggg ggnggetttt tnttaatttt teee	454
<210> 707 <211> 398 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 707 ttatangcat tacntnttta ttcaagctcc acaataacgc agcaaaatac atactgattt	60
catatcacca gcgaaaaaac catactcaaa taagttaggn aacatccaac taggagtgga	120
ononcome academic and academic ac	

```
tggacaaaaa cctaggcttt gactccacac accacactct actggatcag gagaatactc
                                                                          180
tgatgaggtc tcatttccac ttgagtttga agagcctgtc gtttgggatt tctaggaata
                                                                          240
tttagtctaa tgattattcc tttctgtagc ataggatgat gccctcacaa aacagccagt
                                                                          300
gtgggttaat tactacacag ctgtcagctg ccatacatcc taataccnat tatttaatag
                                                                           360
gcagttaaca cttgggngct tggntgcttt acaatggc
                                                                           398
       708
357
       DNA
Homo sapiens
       misc feature n=a,t,g or c
<400> 708
tttttttttt qctqacttta attacaaact ttatttgtca atacaattca cagtttatac
                                                                            60
atggcgcatt ccaccatata aattttcgga acagttattt gaggaaatgg gtgtagcttt
                                                                           120
ctttctaaaa gagcctgact ttctaaaatt ttggttggat ttttttaac tttataaaag
                                                                           180
tacttttaac aaattaattg aatatttaca tttctagctt aaatttaaat tttggaaaat
                                                                           240
aagcgtctat tagtttattt ggcttctttt aaaggattcn ggggtttatt ttttccagga
                                                                           300
ccccaatccg gatggccncc ttattccgga taccngctcc ccaccccca ccaccac
                                                                           357
       709
347
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 709 accaaacaaa anctttatta atgcattgac aatcagtgaa gacaatgaaa acccaccact
                                                                            60
tttgtccgtg aactgagaaa gaaaatggca atgtcatatg gcattaatga tgcatgagat
                                                                           120
ctatgggtgt agtgtcacgt ctaggcgtgt agtaatccag tcttcggcct tactccaggg
                                                                           180
agaaagattc agctttgtta ctttccagtc actctctccc gtaacacagc accttgggca
                                                                           240
cagaaagcag agcgnccaaa acccaggant gagggacagt taaaattcaa cttcaaggct
                                                                           300
                                                                           347
acaqccatcc caacqqqtcc tncccagctc ccgcgggatt ttttacc
       710
367
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 710 tnnaatanat ttttactgaa aacttttatt gtaatcaaaa agtgacataa cagggttgta
                                                                            60
atqaattcaq caaatcattc tgctgatatt ttagaactta tatcagcttt tgccaggcaa
                                                                           120
ttaaaaaatt caaatgtgaa aatttcacat tacagtaaac tccaccccaa ctaattaatg
                                                                           180
gtggttaaaa ataataggcc ctagcaaaac ctctcatgtt acatggtcac aactcacaat
                                                                           240
                                                                           300
tctqtacaaa aqttcqtqtt ataanqctct qatgtaaaan tcaaataatc aaggcaggca
atattttagg tgcagcacag ggtcttccat gtcattattt acaagggctt gaatctcttt
                                                                           360
                                                                           367
acattat
        Homo sapiens
       misc feature
n=a,t,g or c
```

<pre>&lt;400&gt; 711 nagaatgata ttagagtttt attttgaata aaagantatg ttttagaaat a</pre>	ıcatagtgaa 60
atatggatag atgatgtgac atttgggatt tgcttcaaaa ttacctagnt c	
cggataggtt gggggttaca gatcgggagt tagcaaattt tttctataaa g	gcgctacaca 180
aagtaattat tttaggtttt gcaagccata gagtctgctg caattactca a	actctgccaa 240
tgaagtacaa aaacagccaa aaacaataag tcaacaaata tgtgtgggct g	gtgttccaat 300
aaaaccttat ttacaaaaac agtcagaggg gccgggnttt tgtccncagg g	
ggtgtgcccg actaggtttg taccgggtgg	390
<210> 712 <211> 424 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
(223) 11-4,0,9 01 0	
<400> 712 ggaaacatga tcaagattgt ntattagaaa aacataaaga tgaactttct t	ggcacagaa 60
atgagataaa atatacagtg ctacaactgc agaattagca cggacgccaa t	
gcaaatattt aacagtagct ttaatgaatt aatgcacaat attttgaaaa a	atctttgacc 180
ttgctcataa gcagatgcct gccttgaaga aacactccaa gtctgccgtg a	attccgagcg 240
aaatgccaag gcagagtcaa gacaatcatt acctttaggg ctgaaacctg g	ggcatgaggc 300
tgccccttct gggatgcctc ctaaccagtc tgatgtactg gggaaggagg a	agtgaggtgg 360
ggtcttcctc gggtcccaga agctgaaaac ccagcccttc ctttgccatc a	agttctgtgc 420
caag	424
<210> 713	
<210> 713 <211> 330 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 713 aagaatgagt attittgatt tattcaaagt ttcaatctaa aacctcaatg a	aaatctacca 60
cctttattac aaggggactg atggttcctg aacagaaaga aacaaaggtc	
gcaccggaca ttggagaggg aactggccga gtgtgcagga ggtttggtcc a	aatagatcac 180
tgacaggcta aaagccacat tttgttgaga aattacatca gaactgttta a	aagagtataa 240
acctccataa gaaaactaaa gatggcaaat gagattcaac tctgttactt o	caagtctata 300
atgtetteat eggagaaage egtgagetgg	330
<210> 714	
<210> 714 <211> 399 <212> DNA	
<213> Homo sapiens	
<400> 714 tttacttttc ataaatttat ttatgaaatt aaatgtggtt tctggcttgg a	agaaggaata 60
gtgcaagagt gactgtccat gctgctgaat cctgtgggct ccacgccagc t	tegecaggee 120
ctggctctgc tcctggcgcc ccttggcagg acagggcgcc atctccacac a	acccgctgcc 180
tgggctgtgg gtcagtcctg tgtgctgagc cacagaattc ggtctctctc t	ttatggcttc 240
tcacgctcac gagcgtaagg caatcttctg tgtcactaag aatcaattct t	ttttctccat 300
tgtttgttgt tagaaaaaca agatgccaaa atccaaacaa aaaccaggaa	cgaggtgggt 360
tctggagcta ccgcacagca ggaggcagac tgaccacac	399
<210> 715 <211> 259	
<212> DNA .	
<213> Homo sapiens <400> 715	
tttattgagt acttactatg tgtcagtcac agttccaagg gcttcatgag t	
tttaatgagt taatccggac aactcagtag accaatgaga caggtactct t	tatcatctct 120

atattacaga tgaggtcact gaggcataca gcacctatgt aagttaccca gctgctatga ggcagctcca ggattcaaac ccagcagcct ggctcacatc taactgccag cctactaca		180 240 259
<210> 716 <211> 415 <212> DNA <213> Homo sapiens		
<220> <221> misc feature <223> n=a,t,g or c		
<400> 716 tagagacagg gtctcgctct gtctccaaag ctggagtgca gctccatcat		60
agectecgne tecegggttt gagegateet eccattteag tgtaaccace		120
ctatcaccat agattagctc tgcatgtctt tgaacttcat ataaatggaa		180
ataggetett ttgtgtetgg attetetetg ttaacactgt gtetgtgaga		240
ctgtgtgtag tattatgctt catccttttt tgttgttgca tagtattcca		300
ataccacaat ttatttgtct gttttcccaa ttgctgtgca tttggggatt		360
ttcacctatt ttggaataag gctgcctagg gaccaccctt ggtatagggc	ctggg	415
<210> 717 <211> 477 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c		
<400> 717 tattaccntg agattettea actacetgea acenttettt aaacetaaeg	caatctcata	60
taaaagagcc tgggatgaga cttcgaaggc agaagtctac tgtctcatta		120
ttggctattc catgaaatca aatcttattt cagtgcatgt gtgttccaat		180
tattgcagga ggcaagtcta tetggcctat gggtgtagct tgctgactcc		240
tccctcataa aattaaaaac accctcaaga ttaaaattac ggtagggcc		300
taaaatattt teettetett ttteeacete catgtatgae tgettgeaaa		360
caaatggcag tcactaataa ttgtcttccn gtgggcagcc cctgggaggg		420
ggttaacaaa cctggtttct tttaaagggc cantaatccc ggctggggng		477
<210> 718 <211> 514 <212> DNA <213> Homo sapiens <220>		
<223> n=a,t,g or c		
<400> 718 ttttcaggaa agtttttatt ttaaatattg gtgattcttt aaccaggaat	gcaaatgcta	60
ctgaagtgct gtgtgtgtct ctgtgagagc cttcatataa ataaattcat		120
agtccctggn caggccgcat gctgatattc aatttgggga atggtgatgc		180
atctggggga ggcaacaggg angcctaggg nctttttntg gccccctntn		240
cggggggatt tnnantnttt agccccgggg atctctgggc tttttggaaa		300
ttttcctgag ttcccatggc tgccctgctg ccggggctga ctaagcaggc		360
ttctcagtgc atattttaca tttttctcct tcaaagagaa gccaggggag		420
gctacagaag gtgctctgtg ggggacttgg ggccnggtca gcaaccaagc		480
cccttttggg ttnaagggct tngctcctcc ccca		514
<210> 719 <211> 298 <212> DNA <213> Homo sapiens		

<220> <221> misc feature	
<221> misc feature <223> n=a,t,g or c	
<400> 719 cttcaacaca gcagaaattt atttcccacc caggtaaggg gaccctgagg taggcagtga	60
cttctgtcgg cagcgaacta ggccctctca ccaggctgcc ctaccgtgct cagtgctgcc	120
tcatggtgca aagtggttgc tgagctccag tcatcacttt agccngcnga anggggaagg	180
gnangggnaa aannttteec eccenetngg gggatttett tnennnecec eagtnaggat	240
tttgngttta ttataaggna agaagagaca gttagcngag gcttccctgt ccaccagg	298
<210> 720 <211> 498	
<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 720 tgggttggga ttttcaatct ttattatttg aaattattgt ttcaaatttt attacatacc	60
atggccctag tattttgttt aaaatatctt tatttttctg taaagaacaa gtgtgccata	120
tttagctttt gatagaaaaa attaagaaac tatcataaag ggaatagcta aaagaaaggt	180
tagtaaaggg agccatcaca aggagagatt ttggaaaagg gtggtgtctt agtccatttt	240
gtgtttctgt aacagaatat ctgagactgg gttatttata ataaacagaa atttatttgg	300
cttagttgta gaggctaggg aaattcaaga ccnaggggcc agcatctgat gagggccttc	360
ttgctgtgtc cacccacggg caaaggtgaa ggcagaaggg gaaaaagagt ntgtgaggga	420
aaagagggga gcccaaactt gcttttataa cccaacacac tcctgaggat aatggggntt	480
aatcttttca tgaggggc	498
<210> 721 <211> 537 <212> DNA <213> Homo sapiens	
<pre>&lt;210&gt; 721 &lt;211&gt; 537 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<220> <221> misc feature <223> n=a,t,g or c	
<220> <221> misc feature <223> n=a,t,g or c  <400> 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc	60
<220> <221> misc feature <223> n=a,t,g or c  <400> 721 acatttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg	120
<220> <221> misc feature <223> n=a,t,g or c  <400> 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg	120 180
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc</pre>	120 180 240
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggtgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa</pre>	120 180 240 300
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac</pre>	120 180 240 300 360
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc</pre>	120 180 240 300 360 420
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt</pre>	120 180 240 300 360 420 480
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct</pre>	120 180 240 300 360 420
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct  &lt;210&gt; 722 &lt;211&gt; 402 &lt;211&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 300 360 420 480
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct</pre>	120 180 240 300 360 420 480
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccaacc tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct  &lt;210&gt; 722 &lt;211&gt; 402 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 722</pre>	120 180 240 300 360 420 480 537
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaatttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccggga ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct  &lt;210&gt; 722 &lt;211&gt; 402 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 722 agtttttaaa taatgtcaca ctgaacaaca catttaacag ctgaataatt tgtaatgaag</pre>	120 180 240 300 360 420 480 537
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  </pre> <pre> &lt;400&gt; 721 acattttatt tataacagga aaaatatatc cctctatatt ttagtttaaa aaaatactgc ttggaagcag cccatatcct gtgcgttttg tgaattttca ggtgagactc cctcaacccg ctttcccccc tcactgccac accactgcta gtccatgggg agggggctgg ggttcaggtg ggacctcttg gttgggagcc tccattgcta ctttgcattt aaaggaccga gagtctcctc aagacaagac cactgttatg tgatggatgg ggggtgtctg ttgctggatc cagttccaaa aggtgcccag ggaacctggg gaaggtgact accctatcat ctcacaggga ctccccacac tgggaacccc agcctcctgg ggtcctgggt ccaggggctc ttttcccctg ggctgggtcc atgggttgcg acacccacgg cacccgggca ttccacgntg gtncttcgag gggagggctt nagagggcta agctncacct tctntttccc tggggtngcc agattcantc cttncct  &lt;210&gt; 722 &lt;211&gt; 402 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;400&gt; 722 agtttttaaa taatgtcaca ctgaacaaca catttaacag ctgaataatt tgtaatgaag actaagcaat agttaaaata taacattatt aacagttgtg gaaaatacag aaatttatca</pre>	120 180 240 300 360 420 480 537
<pre> &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <a href="#page-400">400&gt; 721</a></pre>	120 180 240 300 360 420 480 537

```
723
552
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 723
ttacaattga aacaggtett tatttacaeg gaageagaga gacagaggga tgagggeagg
                                                                         60
caccccaaaa gtgacttcac attcaccaat gtttcagtgg cttctaagac cacagcagan
                                                                        120
180
gggttggatt aaaaacaaat accaagtgtt tctggcatca gttgaaaaag atctgagaaa
                                                                        240
gaggaactat tgaatgtcca gaaaaatcaa agttctggga ggctaggaaa tctgacattt
                                                                        300
ctctgataga gagatcactg ggtcatcagt tcattttggg gaaattcttt acagttaagg
                                                                        360
tgatgtgttt cctttcattg gtaaatttaa cagggagagg catcattatg gggatacatg
                                                                        420
                                                                        480
cagggetegt geegaattet tgggeetega gggeenaaat tteeetatag gtgagtegta
tttaaattcg gtaatcctgt ccataggctg ttttccngtg gtggaattgg ttatnccgct
                                                                        540
tcacaatttc ct
                                                                        552
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 724 atcaaagatg gctcagagaa tggtaaggca acagtgagaa acatcagctg tacttgtcga
                                                                         60
gaaggtgtct gattacacag cgttaccatc ccagctggcc ctttgctata acagaggagt
                                                                        120
gggtgagtga tatgttccaa cagctggtct aaagaccaga ggcacagttt caggtaaagt
                                                                        180
qcaqgaacag ggtagaggct acaggtggaa agatctagaa gctctgtgtc caacaaggtc
                                                                        240
ctcacgcttc ttatcagcat ggactgactc aatctaaatt tggtgtcccc cctccacagg
                                                                        300
ttctagtaga aacctacggc atgaaggaat agaatgcaga cagantatag ttaaatccca
                                                                        360
                                                                        388
aaaaagggcc cttttctttc aaaccctg
       725
495
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 725 gtggagatgg agtatgtatt tattttacaa aaataaatca ccatcttcgg accatttgta
                                                                         60
                                                                        120
gactggaaca tttcgagcaa tgagtgcgcc acacggacga gtgccctggt gactccctga
tgttcgcgtc acccccaggg ccaccttggc gcccgcatga gcctcgnttc ccactcccgg
                                                                        180
                                                                         240
cctccaactc ccttccctcg cagccgccat tcaccttctg ctgtttattt gtctgcagan
                                                                        300
gcctgggaca ccggaaaagg cgattccctg agcgcctggg agttggagac aattcctggt
                                                                        360
tcagaattta aacatctttc taggtaagcg ntgctccaaa actcttcgcc gcgtgggact
                                                                        420
tttqcaccaq qggcqgttgg ggagganttg gccctccacg gttcctgggc aaccgcggcc
tttttgaaag aggttctggt caatatttaa cttcggagga atttggaatt ggattccttt
                                                                         480
                                                                         495
aagttcttnc cctgc
<210> 726
<211> 501
<212> DNA
```

<213> Homo sapiens	
<400> 726 ttccatccat ttagcaaact ttattcctga ccacatttta tgccctgggt gtgaagtggt	60
acaaggaaaa tgactaagac atagcctaaa tttttaacaa gtaaatctgg ccatgcaacc	120
aataaacagt tottagtoag gtgootatag toocaggtac ttgggaggot tagggaagat	180
gattgcttga ggccaggagt tcaagtccag cctggggcaa cacagtgaaa cctgggtctc	240
taaaaaccaa acaaaaaaaa actacagtgc ttctcaaacc caaatcacct tcccagggct	300
ctttctgccc aaatatccct caaaccaaca ggatgtgtgt tgggtaaatg ttggaaccaa	360
ttgggctctc tggaaaaact tgtgtgtgtg tgtgtgtgtg cgtgtgtgtg tgtgtgtg	420
tgtattaggt ctgtatttaa tactgggcta ttaggattcc ccaaaatttg accaggcacc	480
attccccagg ccagcatagc g	501
<210> 727 <211> 422 <212> DNA <213> Homo sapiens	
<400> 727 agcaaggttt taatggaaag cataaaacac tggaaatatg gacagaaatc agattattac	60
cetttattt ttttccctgc ceetttcaca atgagactgg aggggattca agaaccactt	120
gaaataaagg cgaaatgatt agattttttt ctcctaattg cctaacgctg atgtcatggt	180
gtacgcaaaa tcaacattga tctctaagtg aaagaggaga aacagaacaa catcaacagc	240
ctttcgaggt aaactgtggg gccagaatct atttagggca acccgcaggg cccaaaatct	300
ctggaaaagc ccaacagtgg gagccagttt ctggatgctc ctctgttggg tgatctggat	360
ctttgagtgg ggggaaatct ggttaggaaa cagcctcctc gaggggagcc ctccccctgg	420
gt	422
<pre>&lt;210&gt; 728 &lt;211&gt; 169 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 728 ttcacaaagg tttattgggt ccctgcctgg tgctggtttg ggttagtcac tgtagaggat	60
ccatctgggc cagcctggga ggggcaggtc tggagtccna ggcagacacg aaaccggggg	120
tgacaccagg ggctttggag gctgccatgc tgaggacagc tctgggagg	169
<210> 729 <211> 359 <212> DNA <213> Homo sapiens <223> misc feature <221> n=a,t,g or c	
(223) II-a, c, g OI C	
<pre>&lt;400&gt; 729 ttattaagac tgggtcacat ccagctagta catttcagtg ccctttctgg tgctncctcc caggagcaga cactgcaaat ttcagaaccc ccatctagag aaacccctaa cctgtgatct agcttccgag gctcagtgtt ggttcttgtg gtagtgctga tgtgtgggta ccactgaggc caggccacag tcgcatgtac cctcctctgg gctgactcac gaggctacag gggacagcac acctaatgag caggtctgtc ctccagacat acctattaac aagcacgttc ctgggctaaa aaataaccag atctttttgg ccgtgccctt caggttggga gaaagaaac ttcgagact</pre>	60 120 180 240 300 359
<210> 730 <211> 434 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	

<pre>&lt;400&gt; 730 tttttttttgg ctatcaatat atttattatt agcatgacat attatgaaaa attatttcc</pre>	60
aaagacttag ccagtaacac tacaaaaata gaaagcccgt taattcctgt gaatttatct	120
gtgtgtgtcc atgtccagta attatttcac tgtctgtctg aagtactaac aatactaaat	180
ccaatgctcg gcgccacgct gcaatctttg gtgtaacaac gtcataaact ctcggaatct	240
gctccagttt atttgaaatg tctgaattaa aaattctact atttagttta ctatattcat	300
tcaagatgta agatgaagga gagccagagt ctgtggcatt ttgcagatga tgttgaatgt	360
atgtgctggc ttcaaattct ggatgagtaa ttggcagtgg tatataggag agttggaaag	420
gtatttcngc catc	434
<210> 731 <211> 423 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 731 ttagctggac aaagtacttt taatgcttat tttacaaata tgtacctgtg gtgctaatac</pre>	60
taggcaaaga aaacaggacg attcaagagc agcctatgta actaccaact caagcactaa	120
cactagetag atcacettea tgetttaaaa tttaaagtta tggagtaget gtgeecaeee	180
ccccccaaa aaaaagcttt aataaaggca ctgcagcgtt aactaagttt tagggtaaat	240
ttaggcaatt aacaattcga agagacttgt ggtttatgta ttagtaattc aaattactgt	300
tttagagatc tcaggtagtt aaccaattct tgctcaaagc actaatgttc agtccctcac	360
catttatgct gggtatgagt cccaatgcat gggtattgca acctattgtc aggccctaac	420
atg	423
<210> 732 <211> 676 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
	60
<220> <221> misc feature <223> n=a,t,g or c	60 120
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc</pre>	
<220> <221> misc feature <223> n=a,t,g or c  <400> 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc	120
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt</pre>	120 180
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat</pre>	120 180 240
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag</pre>	120 180 240 300
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca</pre>	120 180 240 300 360
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat</pre>	120 180 240 300 360 420
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <pre> &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc</pre></pre>	120 180 240 300 360 420 480
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <pre> &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctctttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagttttt gtatgtttta taaaaattca cagaactgca aggttcagtc</pre></pre>	120 180 240 300 360 420 480 540
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <pre> &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggttcagtc acttttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg</pre></pre>	120 180 240 300 360 420 480 540 600
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  </pre> <pre> &lt;400&gt; 732 ttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggttcagtc acttttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct</pre>	120 180 240 300 360 420 480 540 600
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <pre> &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggttcagtc actttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn</pre></pre>	120 180 240 300 360 420 480 540 600
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagttttt gtatgttta taaaaattca cagaactgca aggttcagtc actttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct  &lt;210&gt; 733 &lt;211&gt; 446 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 733</pre>	120 180 240 300 360 420 480 540 600
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttattt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tetectgett ttccaagtet tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttgt atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagtcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tetectaaaca gcagcagaat cttaaaatac ctggctggca tetetttet ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggttcagtc actttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct  &lt;210&gt; 733 &lt;211&gt; 446 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 733 aaaagggaga gtgaggcttt ttattgtgta tgaattcacg tggtatcgac aactccacac</pre>	120 180 240 300 360 420 480 540 600 660
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttatt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacaga ttttaaaagcc tacgtcttg atataataca atgcaggcct acaaaaatgg tgcagcata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggtcagtc acttttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct  &lt;210&gt; 733 &lt;211&gt; 446 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 733 aaaagggaga gtgaggcttt ttattgtgta tgaattcacg tggtatcgac aactccacac aatattaaaa cactgcgaga aagtggtgc ggcacacctg gaattttaaa aaagtcagaa</pre>	120 180 240 300 360 420 480 540 600 676
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttatt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacagga ttttaaagcc tacgtcttg atataataca atgcaggcct acaaaaatgg tgcagccata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagtttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggtcagtc actttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct  &lt;210&gt; 733 &lt;211&gt; 446 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 733 aaaagggaga gtgaggctt ttattgtgta tgaattcacg tggtatcgac aactccacac aatattaaaa cactgcgaga aagtggtgc ggcacacctg gaattttaaa aaagtcagaa ataaaaacaa ccagacatcc caatgcagat ggcatagaac ctgctagaac cacaggcgc</pre>	120 180 240 300 360 420 480 540 600 676
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 732 tttttcagtt ggacacaaat gtatttatt taccctagca atagaacaaa atataatttc tttagccatt tttcatgaga atagttcatt gtacagttga ggaaacatat gaaataaggc ctgtggttga ttgctagtgg ttaagcatgt tttcaatctt tgccttaatg taaaagattt gcagtgaact gcaaactgat gcagaatatc tctcctgctt ttccaagtct tgtcaggaat agtaaggtac agtaaatttg tcccacaga ttttaaaagcc tacgtcttg atataataca atgcaggcct acaaaaatgg tgcagcata tttacaaatt tagttcacag actgctgcag taaaatggct ggaaagttt gttttgcttg tttcacaatt tctctaaaca gcagcagaat cttaaaatac ctggctggca tctcttttct ttgtaacaaa taattcactt tagtatactc tgtgtatata caaagtttt gtatgttta taaaaattca cagaactgca aggtcagtc acttttttac accagagaac cacaggtcaa gagcactctt caagcagagt tgagggactg cgnagccaat ggtgccttat tattaaaccc gcatgggcct ggatcctagc tgagataagn tgtaccacgc atgcct  &lt;210&gt; 733 &lt;211&gt; 446 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 733 aaaagggaga gtgaggcttt ttattgtgta tgaattcacg tggtatcgac aactccacac aatattaaaa cactgcgaga aagtggtgc ggcacacctg gaattttaaa aaagtcagaa</pre>	120 180 240 300 360 420 480 540 600 676

210> 734 2213> misc feature 2223> misc feature 2224 2246 2246 2246 22472  misc feature 2246 2246 22472  misc feature 22472  misc feature 2248 2248 2248 2248 2248 2248 2248 224	ggacttttta ataagtgacc ccttgaggaa gggcgtggtg ggctccacct cccaccgga agcccccccg ggtccactca cgggcggaca ggtgtgtgac ggccctctcc tacctgcccc agaacttggg caggacgggc tgttaa	360 420 446
caaaaacaga tagttaatac tcctacttat cataaaactg tgttagaatt cagcagctgg attacataat actattataa taagccttta ttattgagta actttacata cataatattt 120 atatgcacaa gtatttgaga gcttataggt caagccctgt gctaagtact ttgtacccat 180 gatctgataga acccttata acaccttgat gagatgcagc cattttctac acactacaca 240 tgatgaaacc agcacaggaa atcagataac ttgcctgctc ttggccacca cgcggtgcct 300 gctgctttgt gtttataggg aaattgcaca tggcaaacat tcaacacatag gcttcctgcc tttattatta aagggcaaaca atgggtaagag aggatagcat gggtctgat ttgttcaatg 420 acctaaaaat aaactgatct tattcatacc ctgccttgt ctaggaaagg attcnagtgg 480 cttctcagca gagggcagagg caaggaacag gtgctcagga attggaacga ctggcccact ggccccactg cactctgang gggcttcact ctcctcagac acgagncag gagcccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat band 500 acctacaaaca gatgggtgg gaggaccac ggacccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 acctacaaaca gatgggtgg gggaacgac acgagacca ggaaccaaca agaacacaa gatgggtgg gggaacgac acgagaacaacaacaacaacaacaacaacaacaacaacaa	<210> 734 <211> 604 <212> DNA <213> Homo sapiens	
caaiaacaga tagttaatac toctactat cataaaactg tgttagaatt cagcagctgg attacataat actattataa taagcottta ttattgagta actitacataa cataatattt 120 atatgacacaa gtattgaga gettataggt caagcoctgt gotaagtact ttgtaccaca 180 gatctgatag aaccottata acacctgat gagatgcagc catitictac acactacaca 240 tgatgaaacc agcacaggaa atcagatacc ttgcctgotc ttggccacca cgcggtgoct 360 tttattatta aagggcaaat atgggtaagg aggatagcat ggggcttgat ttgttcaatg 420 acctaaaaat aaactgatct tattcatacc ctgccttgt ctaggaaagg attcnagtgg 480 ctttattatta aagggcaaga gggcccactg cactctgang gggctcact ctcctcagca gagggccagg caaggaacag gtgctcaga atggaagag attcnagtgg 480 ggcccactg cactctgang gggctcact ctcctcagac acggagcagg caaggaacag gtgctcaga acggancatg gaaccagag 600 ttat	<220> <221> misc feature <223> n=a,t,g or c	
attacataat actattataa taagccttta ttattgagta actttacata cataatattt 120 atatgcacaa gtatttgaga gcttatagt caagccctg gctaagtact ttgtacccat 180 gatctgatag aacccttata acaccttgat gagatgcage catttctaca acactacaca 240 tgatgaaacc agcacaggaa atcagataac ttgcctgctc ttggccacca cgcggtgcct 3600 gctgctttgt gttttatggg aaattgcaca tggcaaacat tcaaccatag gcttcctgcc 3600 tttattatta aagggcaata ttatcatacc ctgccttgtt ctaggaaagg attcnagtgg 420 acctaaaaat acacttgate tattcatacc ctgccttgtt ctaggaaagg attcnagtgg 480 cttctcagca gagggcaggg caaggacaag gtgctcagga attggagcat ctggcacgac 480 ggcccacatg cactctgang gggcttoact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 ctaggaaaga attgaagaca cactggaga agggcaggag 600 ttat 604 ctaggaaaga atggagacaag gggcttgact ctggcacgac acgagacaag gggctgagacaag aggagacaag gggcagaga acgagagacaag gggagacaaga aggagacaaga atggaggagagaagaagagagagagagagagagag	<400> 734 caaaaacaga tagttaatac teetaettat cataaaactg tgttagaatt cagcagetgg	60
atatgcacaa gtatttgaga gcttataggt caagccetgt gctaagtact ttgtacccat 240 gatctgataga acccttata acaccttgat gagatgcagc cattttctac acacatacaca 240 tgatgaaacc agcacaggaa atcagataac ttgcctgctc ttggcacaca cgcggtgcct 3000 gctgcttttg gttttataggg aaattgcaca tggcaaacat tcaaccatag gcttcotgcc 3600 tttattatta aagggcaaat tattcatacc ctgccttgtt ctaaggaaagg attcnagtgg 420 acctaaaaat aaactgatct tattcatacc ctgccttgtt ctaaggaaagg attcnagtgg 480 cttctcagca gagggcaggg ggggtcacc ctcctcagac acctctgang gggctcact ctcctcagac acctctgang gggctcact ctcctcagac acctgaggaccac agggcccacac acctgagg gggctcact ctcctcagac accgagncatg gaaccagagc 540 gggcccacact cactctgang gggctcact ctcctcagac acgagncatg gaaccagagc 540 ctat 6004		120
gatctgatag aaccettata acacettgat gagatgcage catttetcae acactacaca 240 tgatgaaace agcacaggaa atcagataac ttgectgete ttggecacca egeggtgete 300 gettgetttg gttttatggg aaattgcaca tggeaacat teaaceatag getteetgee 360 tttattatta aagggcaaat atgggtaagg aggataggat		180
tgatgaaacc agcacaggaa atcagataac ttgcctgctc ttggccacca cgcggtgcct 300 gctgctttgt gttttatggg aaattgcaca tggcaaacat tcaaccatag gcttcctgcc 360 tttattattat aagggcaaat atgggtaagg aggatagcat ggggcttgat ttgttcaatg 420 acctaaaaat aaactgatct tattcatacc ctgccttgt ctaggaaagg attenagtgg 480 cttctcagca gagggcaggg caaggaacag gtgctcagga attggagcat ctggcacgca 540 ggccccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 cttctagca gaggaacag gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 cttttggcacc taagaaacat gatggttgtg gataatgcca caagtacaca gggagaccca 600 gtaaccaagac atgcagggtg agggcaagcg gctgagctgc ccaagcattt caaaaccagg 120 actttggctc cccatgcagt tggagggtag aagggatgtg cggaactgat gacttcaccg 180 gctcctcagc agcatgtaca ttcaaattga agatgcttga gagcccact ataccaaatc 240 gtgagtctgg tcactccctc acgagagctt ggtgcagtga cagtagaaa agctgagttc 300 caattgagtc tgttgcacca agagtcctt tgaagacgc catcaaagaa acttagagtc tgttgcacca agagtcctt tgaagacgct catcaaagaa atttttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404 ccacaattgt tgactctacg taaaattgat ttttacatgt caggaataag atgagaaca 120 acgaacaaat gcacagtcgt tctttcta agtccaattg ccaggaataa atagagaaca 120 acgaacaaat gcacagtcgt tctttcat agtccaatag tccactcttg aatagacac 120 acgaacaaat gcacagtcgt tctttcat agtccaatag tccactcttg aatagacac 120 acgaacaaat gcacagtcgt tctttcat agtccaatag tccatctttg aatagacac 120 acgaacaaat gcacagtcgt tctttcat agtccaatag tccatctttg aatagacac 120 acgaacaaat gcacagtcgt tctttcat agtccaatag tccatctttg aatagacac 120 acgaacaaat tgattctgg gtagaggaga atgtttata cactctttg aatagacac 120 acgaacaaat tgattcttgg gtagaggaga atgttttata cactccattg aatacatagt 300 aggtaaaaata tgatagatct atatat 240 atcatggca tggtcttgg gtagaggaga atgttttat cactcattg attataaca 240 atcatggca tggtcttgg gtagaggaga atgttttat cactcattg attataaca 240 atcatggca tggtcgcacaaggaggaga atgttttat acctcattgg attataaca 240 acgaacaaat gaaggatca atatat 240 atcatggcaca aaggattt acaaggccac acgagatgt accaggatgagaca atcatatcg 240 atcatgggcaca aaggattt acaaggacacacaaggatcgacacacacaaggatcgacacacac		240
gctgctttgt gttttatgg aaattgcaca tggcaaacat tcaaccatag gcttcctgcc tttattatta aagggcaaat atgggtaagg aggatagcat ggggcttgat ttgttcaatg 420 acctaaaaat aaactgatct tattcatacc ctgccttgtt ctaggaaagg attcnagtgg 480 cttctcagca gagggcaggg caaggaacag gtgctcagga attggagcat ctggcacgac 540 ggcccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 ctttgcaca gaggacaag gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 cttttggcacac taagaaacat gatggttgtg gataatgcac caagtacaca gggagaccaca ggaaccaca gtgaaccaca gggagacaca ggaaccacaca ggaaccaca gtgaaccaca gggagacacaca ggaaccacaca ggaaccacaca ggaaccacacaca	<del>-</del>	300
tttattata aaggcaaat atggtaagg aggatagcat ggggcttgat ttgttcaatgg acctaaaaat aaactgatct tattcatacc ctgccttgtt ctaggaaagg attcnagtgg 480 cttctcagca gagggcaggg caaggaacag gtgctcagga attggagcat ctggcacgca 540 ggccccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 four tat		360
acctaaaat aaactgatet tattcatace etgeettgtt etaggaaagg attenagtgg ettetcagea gagggeaggg caaggaacag gtgetcagga attggagcat etggeacgca 540 ggeececaetg eactetgang gggetteaet etectcagae acgagneatg gaaccagage 600 ttat 600 <pre> &lt;210</pre>		420
cttctcagca gagggcaggg caaggacag gtgctcagga attggagcat ctggcacgca 540 ggccccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagagc 600 ttat 604 <pre> &lt;210</pre>		480
ggccccactg cactctgang gggcttcact ctcctcagac acgagncatg gaaccagage 600 (604 (210) 735 (211) 404 (212) DNA (212) DNA (213) Homo sapiens (400) 735 (212) And (213) Homo sapiens (400) 736 (212) DNA (213) Homo sapiens (400) 737 (212) DNA (213) DN		540
C210		600
\$\frac{4400}{\text{cases}} 735 \\ \text{gttttgcaca} \text{taagaaacat} \text{gagggtagggcaggg} \text{gctaaggttg} \text{gagggtagcca} \text{caaagcattt} \text{caaaaccagg} \text{120} \\ \text{actttggctt} \text{cccatgcagt} \text{tggagggtag} \text{aagggcaaggg} \text{gcgaagtgg} \text{cggaactgat} \text{gaaccaca} \text{gagggtag} \text{aaggccacct} \text{ataccaaatc} \text{240} \\ \text{gtagtctgg} \text{tcaccac} \text{agagagctt} \text{ggtgaagtgg} \text{cacaatgg} \text{accacacac} \text{240} \\ \text{gtagtctgg} \text{tgttgcacca} \text{agagacctt} \text{tgaagacgc} \text{catcaaagta} \text{atttttc} \text{360} \\ \text{catttctcg} \text{326} \\ \text{c211} \text{326} \\ \text{c211} \text{326} \\ \text{c212} \text{bbNA} \\ \text{cacaatg} \text{tggtttataa} \text{gtttctaac} \text{ttcaaattt} \text{gcactggta} \text{tttaaccta} \\ \text{accaaatgt} \text{tggtttataa} \text{gtttctaa} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatgt} \text{tgacctacg} \text{taaaattgat} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatgt} \text{tgacctctacg} \text{taaaattgat} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatg} \text{tgaccaagagtgt} \text{ttttaataa} \text{tgttacatag} \text{tccatcttg} \text{ataccaacat} \text{180} \\ \text{actaggaatgc} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{cacttcattg} \text{atcatag} \text{acatatgt} \\ \text{actaggcta} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{cacttcattg} \text{atcatatg} \\ \text{acttaggcta} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{catggaatgac} \text{atcatatg} \\ \text{acttaggcac} \text{acatatgt} \text{tatat} \text{acaggccc} \text{catttctg} \\ \text{acttaggaaggaa} \text{acatattgt} \text{acatttctg} \text{tggaatgac} \text{atcatatg} \\ \text{320} \text{737} \\ \text{221} \text{ DNA} \\ \text{221} \text{ DNA} \\ \text{2213} \text{ Homo} \text{sapicac} \\ \text{acaggtctc} \text{ acaggtcctc} \text{ acattctct} \text{ taggtgtaaacc} \\ \text{400} \text{737} \\ \text{2213} \text{ Homo} \		604
\$\frac{4400}{\text{cases}} 735 \\ \text{gttttgcaca} \text{taagaaacat} \text{gagggtagggcaggg} \text{gctaaggttg} \text{gagggtagcca} \text{caaagcattt} \text{caaaaccagg} \text{120} \\ \text{actttggctt} \text{cccatgcagt} \text{tggagggtag} \text{aagggcaaggg} \text{gcgaagtgg} \text{cggaactgat} \text{gaaccaca} \text{gagggtag} \text{aaggccacct} \text{ataccaaatc} \text{240} \\ \text{gtagtctgg} \text{tcaccac} \text{agagagctt} \text{ggtgaagtgg} \text{cacaatgg} \text{accacacac} \text{240} \\ \text{gtagtctgg} \text{tgttgcacca} \text{agagacctt} \text{tgaagacgc} \text{catcaaagta} \text{atttttc} \text{360} \\ \text{catttctcg} \text{326} \\ \text{c211} \text{326} \\ \text{c211} \text{326} \\ \text{c212} \text{bbNA} \\ \text{cacaatg} \text{tggtttataa} \text{gtttctaac} \text{ttcaaattt} \text{gcactggta} \text{tttaaccta} \\ \text{accaaatgt} \text{tggtttataa} \text{gtttctaa} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatgt} \text{tgacctacg} \text{taaaattgat} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatgt} \text{tgacctctacg} \text{taaaattgat} \text{tttacatgt} \text{caggaataag} \text{atgagacca} \text{120} \\ \text{accaaatg} \text{tgaccaagagtgt} \text{ttttaataa} \text{tgttacatag} \text{tccatcttg} \text{ataccaacat} \text{180} \\ \text{actaggaatgc} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{cacttcattg} \text{atcatag} \text{acatatgt} \\ \text{actaggcta} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{cacttcattg} \text{atcatatg} \\ \text{acttaggcta} \text{tggttcttgg} \text{ggaaggaga} \text{atgtttaa} \text{catggaatgac} \text{atcatatg} \\ \text{acttaggcac} \text{acatatgt} \text{tatat} \text{acaggccc} \text{catttctg} \\ \text{acttaggaaggaa} \text{acatattgt} \text{acatttctg} \text{tggaatgac} \text{atcatatg} \\ \text{320} \text{737} \\ \text{221} \text{ DNA} \\ \text{221} \text{ DNA} \\ \text{2213} \text{ Homo} \text{sapicac} \\ \text{acaggtctc} \text{ acaggtcctc} \text{ acattctct} \text{ taggtgtaaacc} \\ \text{400} \text{737} \\ \text{2213} \text{ Homo} \	~210 725	
gtttggcacc taagaaacat gatggttgtg gataatgcca caagtacaca gggagaccca gtaacaagac atgcaggtg agggcaagcg gctgagctgc ccaagcattt caaaaccagg 120 actttggctt cccatgcagt tggagggtag aagggatgtg cggaactgat gacttcaccg 180 gctcctcagc agcatgtaca ttcaaattga agatgcttga gagcccact ataccaaatc 240 gtgagtctgg tcactcctcc agcagagctt ggtgcagtga cagttagaaa agctgagttc caattgagtc tgttgcacca agagtccttt tgaagacgct catcaaagta attatttct 360 ttttgagcag atgtacagca catcatggg aaggccatgt aaaa 404	<pre>&lt;211&gt; 404 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
gtaacaagac atgcaggtg agggcaagcg gctgagctgc ccaagcattt caaaaccagg 120 actttggctt cccatgcagt tggaggtag aagggatgtg cggaactgat gacttcaccg 180 gctcctcagc agcatgtaca ttcaaattga agatgcttga gagccccact ataccaaatc 240 gtgagtctgg tcactcctcc agcagagctt ggtgcagtga cagttagaaa agctgagttc 300 caattgagtc tgttgcacca agagtccttt tgaagacgct catcaaagta attatttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404	<400> 735 ofttogcacc taagaaacat gatggttgtg gataatgcca caagtacaca gggagaccca	60
actttggctt cccatgcagt tggagggtag aagggatgtg cggaactgat gacttcaccg gctcctcagc agcatgtaca ttcaaattga agatgcttga gagccccact ataccaaatc 240 gtgagtctgg tcactcctcc agcagagctt ggtgcagtga cagttagaaa agctgagttc 300 caattgagtc tgttgcacca agagtccttt tgaagacgct catcaaagta attatttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404		120
gctcctcagc agcatgtaca ttcaaattga agatgcttga gagccccact ataccaaatc gtaggtctgg tcactcctcc agcagagctt ggtgcagtga cagttagaaa agctgagttc 300 caattgagtc tgttgcacca agagtccttt tgaagacgct catcaaagta attatttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404		180
gtgagtctgg tcactcctcc agcagagctt ggtgcagtga cagttagaaa agctgagttc cattagtgt tgttgcacca agagtccttt tgaagacgct catcaaagta attattttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404    <210 > 736		240
caattgagtc tgttgcacca agagtccttt tgaagacgct catcaaagta attatttct 360 ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404    <210 > 736		300
ttttgagcag atgtacagca catccatggg aaggccatgt aaaa 404  <210 > 736 <211 > 326 <212 > DNA <213 > Homo sapiens  <400 > 736 atatttctcg tggtttataa gtttctgaat ttccaaattt gccactggta ttttaaccta 60 cctacaatgt tgactctacg taaaattgat ttttacatgt caggaataag atgaggatca 120 acgaacaaat gcacagtctg tcttttctat agttcaatag tccatctttg aatagcacat 180 aatggaatgt cagaagtggt tttttaataa tgtatgtta cacttcattg atttataaca 240 atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326  <210 > 737 <211 > 258 <212 > DNA <213 > DNA <214 > Consider to the consideration of		360
<pre> &lt;212&gt; DNA &lt;213&gt; Homo sapiens  <a href="#page-400"></a></pre>		404
<pre> &lt;212&gt; DNA &lt;213&gt; Homo sapiens  <a href="#page-400"></a></pre>	210. 726	
<pre>&lt;400&gt; 736 atatttctcg tggtttataa gtttctgaat ttccaaattt gccactggta ttttaaccta 60 cctacaatgt tgactctacg taaaattgat ttttacatgt caggaataag atgaggatca 120 acgaacaaat gcacagtctg tcttttctat agttcaatag tccatctttg aatagcacat 180 aatggaatgt cagaagtggt tttttaataa tgtatgttta cacttcattg atttataaca 240 atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326  &lt;210&gt; 737 &lt;211&gt; 258 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 737 aatagggcac aaggtattt acaggtcctc atcattctgc ttggtattct gttggtgtaa 60 cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt 120 tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180</pre>	<212> DNA	
cctacaatgt tgactctacg taaaattgat ttttacatgt caggaataag atgaggatca 120 acgaacaaat gcacagtctg tcttttctat agttcaatag tccatctttg aatagcacat 180 aatggaatgt cagaagtggt tttttaataa tgtatgttta cacttcattg atttataaca 240 atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326 \$\frac{210}{2212} \frac{737}{2213} \frac{258}{2012} \frac{DNA}{213} \frac{258}{1000} \frac{737}{2313} \frac{258}{1000} \frac{737}{2313} \frac{258}{1000} \frac{737}{2313} \frac{258}{1000} \frac{258}{2312} \frac{258}{1000} \frac{737}{2313} \frac{258}{1000} \frac{258}{2312}	<400> 736	60
acgaacaat gcacagtctg tcttttctat agttcaatag tccatctttg aatagcacat 180 aatggaatgt cagaagtggt ttttaataa tgtatgtta cacttcattg atttataaca 240 atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326 \$\\ \text{210} > \frac{737}{2211} > \frac{258}{258} \\ \text{212} > \frac{10}{213} > \fra		
aatggaatgt cagaagtggt tttttaataa tgtatgttta cacttcattg atttataaca 240 atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326 \$\\ \text{210} > \frac{737}{211} > \frac{258}{258} \\ \text{212} > \text{DNA} \\ \text{213} > \text{Homo} \text{ sapiens} \$\\ \text{240} > \frac{737}{376} \\ \text{213} > \text{Homo} \text{ sapiens} \$\\ \text{213} > \text{Homo} \text{ taaggtcctc} \text{ atcattctgc ttggtattct gttggtgtaa} \\ ctttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt ttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180		
atcatggcta tggttcttgg gtagaggaga atgttttata ctggaatgac atacatatgt 300 aggtaaaata tgatagatct atatat 326  <210 > 737 <211 > 258 <212 > DNA <213 > Homo sapiens  <400 > 737 aatagggcac aaggtattt acaggtcctc atcattctgc ttggtattct gttggtgtaa 60 cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt 120 tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180		
aggtaaaata tgatagatct atatat 326  <210 > 737 <211 > 258 <212 > DNA <213 > Homo sapiens  <400 > 737 aatagggcac aaggtattt acaggtcctc atcattctgc ttggtattct gttggtgtaa 60 cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt 120 tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180		
<pre> &lt;210&gt; 737 &lt;211&gt; 258 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 737 aatagggcac aaggtattt acaggtcctc atcattctgc ttggtattct gttggtgtaa cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180</pre>		
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 737 aatagggcac aaggtattt acaggtcctc atcattctgc ttggtattct gttggtgtaa 60 cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt 120 tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180</pre>	aggtaaaata tgatagatct atatat	326
aatagggcac aaggtatttt acaggteete ateattetge tiggtattet gitggtgtaa 60 ettitgtgtg tgataaatte tiggtaga actiateete taagetetee aatgtgtett 120 titagetgga getaatgtgt aggaaggeea titttaaage aaateaaaac attaaaaggt 180	<212> DNA	
cttttgtgtg tgataaattc ttctccagag acttatcctc taagctctcc aatgtgtctt 120 tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180	<400> 737 aatagggcac aaggtatttt acaggtcctc atcattctgc ttggtattct gttggtgtaa	60
tttagctgga gctaatgtgt aggaaggcca tttttaaagc aaatcaaaac attaaaaggt 180		

gcttaccg	jac	ttaacgct					258
<212> D	738 286 DNA Homo	sapiens					
		feature t,g or c					
<400> 7 aaaatcag	738 Jag	actatttata	ttaaataact	cttcccttaa	aaatggcctg	accacagcaa	60
tgaatctg	jta	aacacagagt	aatattttc	ctacagtaaa	gagtcacttt	aatctcaaaa	120
gatacttt	tc	actgttctaa	atgacaggnt	tttaagcatt	ttttcctata	tataatacag	180
catcactt	aa	aattttattt	aaagacagtt	gattcaggcc	tgccttggac	tggaaagaag	240
tctttaac	ett	agtgggatta	gtgcttcagc	ttggtcccaa	atattt		286
<212> D	739 261 NA Homo	sapiens					
	739 Ta	aaaagtatct	ttaattgatg	ccaaatatga	acagatcgta	aagtgacaga	60
_					taggttctca		120
					ggagaatgcg		180
_							
				agcaactggc	aaactcaaga	aacaaaacay	240
cgtttttt	ca	gcttaaatgg	τ				261
<212> D	740 816 ONA Homo	sapiens					
		feature t,g or c					
	740 aat	aaatttnatt	ttnctcttaa	gagagacagt	cctgcttggc	acagcagctc	60
ccctgtcc	ett	ctcgccactc	tcagtgctct	ggctgtgtca	tccttagaca	atcgtccttg	120
tctttatg	ggt	ccaaaatggt	gtctgtacat	ccagaccaca	catccatatt	ccatgctgca	180
gaatggaa	ıga	gaggcagtga	agggcggggg	cggctcctgc	cttctcagag	ttcccagaag	240
					taagccactg		300
ctatggag							316
	741 236 NA Homo	sapiens					
<400> 7	741 :tt	attaatctgt	ttggccaaac	aggtaatgga	aactgagaat	aataatttgc	60
taaaaagt	tc	aggtcatgaa	tgcccctttc	ccccaggaaa	cagaagactc	catggttaca	120
gaatgcac	cca	ttgggttatg	acaacgtttc	aaaataatgt	ttccatttca	tatgtaacaa	180
tgtaaact	tc	aaaaatagta	aactctaacc	cctgaccctc	tttacagatc	tatcac	236
<212> D	742 147 ONA Homo	sapiens					
<400> 7	742 :tt	tttttttt	tttttttt	aaaattttaa	aaatttaaat	ttattaggat	60
_					taatgatggt		120
		_	_		aaatttattc	-	180
_	_			_	ccaccactaa	-	240

aacatatctt tcatgaaagg cacataaaga atctaaacta acacatttaa ggaactttga taactttgaa tttctttaca ttacaaagaa aaaaatcctc caaatgaaac agatatgaat atagtttatg gttacacaca cacacacaca cacacacaca cacacaca	300 360 420 447
<210> 743 <211> 517 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
tgctcaataa atgtttactg aatgaatgaa cgcatgaaga atcaatgaag gaggcggtga aggaatgaat gagtcagtgg agaacctgaa ttggttcctc aagccagcct tccactgcc tgcatgcct ggcatcttgg acatttctng gcactaggct gctcctgcca cctcactgcc aggggtgata cagggctgcc ggcctctgca agccggggag nctacgntng tgcanggcat gggaacagtg tgctgtactc ctcctggaag cttaggtcct tgaatctccg cacggccagg gctgcggtca ggctccaggt gaagatggag aaaaaggaga aggcgatggc ggcccgggct gcgtccgtcc cttcgttcag tgggttgtcc ttgggcttgg agacctgcca ctggttggcc aggtagcaga atcccacgaa ccagaagaaa gcccagaang ccgagacacc gatgtcggac aggacggct tcttgcgtc cttgacgct ctgatna	60 120 180 240 300 360 420 480 517
<210> 744 <211> 438 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 744 cacaagttag caatggtatt taattttcct tggccaatgt tatgettgag tttgattcat acaataaaaa gtatggacca ttataattat cttagatttc ctctctgggt atcttttct ggccaaatct tcatactaaa gagacgttaa gccacactgc attttctcta acttgcctgc aaagatttac taaaataaaa cagattgatc ttatccaagt aacaaaaaca aaaaagttat gaaattattt tgctgcacaa atctaaaata ctattattaa ccataatgtc agcttactta ggtcaattct tcaattgcac tattgctttg aactttcaca aactgtcatt ttcctccat tctaaatatg acagttcagt tactaaggaa ttggttttna gttaacaatt accttcaatt tcatatgaaa caggagct  &lt;210&gt; 745 &lt;211&gt; 418 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	60 120 180 240 300 360 420 438
<pre>&lt;400&gt; 745 tttgcatctc tggtaatgct ttattgattt gagggatcct gctgcacctg gctccctacc tctccattct catctgaagt gcccctcagg ccttccagac acttgccccc accagagatt ataatacact catgagaatt gatatatgtg tgtgtctgtg caaatgcgtg tgtgtatata tatgtatgtg tatatatata cacacatata tatgtgtgtg tatctctata aacacatata cacacacaca cacacacac tatatatata gatatatntg tnncngnngt acagtatta caggtacaaa taaaatnggc ttgaaaatta cagtggtggt tgggacccat ctcagttcag tttactcagc agatagaaaa ataanggccc agtgggcctt ttgaacggca ttngaatt &lt;210&gt; 746 &lt;211&gt; 389</pre>	60 120 180 240 300 360 418

<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 746 aaggactttt tcccctttaa tatgaaagta taactacagc agttcaatgt acaaatacaa	60
aaaaagttct catactaaaa aaaaaaaagt accataatac tgtacataca aaaactgttc	120
aacaagaatg atttaaatat gtctgttctt gtccagatct ggaagacaca aatgtaaagt	180
tctgcaactg tattattgct aagaacatgt gcctgggaac actgtgtttc cctttctctc	240
cctcagccca gccccgcctc cagagtcccc tgagcttgga tcatgagcca acagcatccc	300
tgaagataac cagagccaaa tgtttactca atggaagtca ttattcagtg agctgctgct	360
taccataaac tnatgaaaag cacaggttt	389
<210> 747 <211> 318 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 747 attatttatt tacatataca acacttgtga aaagggcgct agataagtag aacaagaagc	60
ccagtttctg gtacatcctg cntctcagtc acctctaggt ctctggaact tgaaagctat	120
gtctcttctt gcagggttct gttacaatcc attgattttc cctcacggta taaagttccc	180
tttgcttaag tttcactgga ctatttcccc caaggtcatt ctgacaaatg atgttctttg	240
ttgtttatac tgttcaataa gatttcattt tgaagaacat gatgnaatca tgtgacgaca	300
ttcnttcccg ttattgaa	318
<210> 748	
<210> 748 <211> 395 <212> DNA <213> Homo sapiens	
<pre> &lt;211&gt; 395 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<212> DNA <213> Homo sapiens	60
<212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	60 120
<212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca	
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatatctgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagagt ggtgctgaag attgataaat</pre>	120
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;2223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatatctgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca</pre>	120 180 240 300
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagetgttta tttacttttg ceccatgagg ctatgaatte ctccaggaca aattggetgg cactttgetg ctgtttaata aatatetgae aatgeatgaa tggeagtgte ctggeagaaa acagaatagt ceacettgag aggeaacaag tectaacage tttttgttta cneagagget gatecaceet eteteagaga tettagaggt ggtgetgaag attgataat aggacacgaa tgeectaggg teeettetga catggtgatt atggggeagt gactetggea gggggetgna ggggatettt gaaaagcaac caaggeeegg ttgagetaat cacttgatat</pre>	120 180 240 300 360
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;2223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatatctgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca</pre>	120 180 240 300
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgtta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatactgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgtta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat cagtttgggt tcacagcagc ttgtgttcca gaaag  &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 300 360
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagetgttta tttacttttg ceccatgagg ctatgaatte ctccaggaca aattggetgg cactttgetg ctgtttaata aatatetgac aatgeatgaa tggeagtgte ctggeagaaa acagaatagt ceacettgag aggeaacaag tectaacage tttttgttta cneagagget gatecaceet eteteagaga tettagaggt ggtgetgaag attgataaat aggacacgaa tgeectaggg teeettetga eatggtgatt atggggeagt gaetetggea gggggetgna ggggatettt gaaaagcaac eaaggeeegg ttgagetaat eaettgatat cagtttgggt teacageage ttgtgtteea gaaag</pre> <210> 749 <211> DNA	120 180 240 300 360
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatatctgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat cagtttgggt tcacagcagc ttgtgttcca gaaag  &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 749</pre>	120 180 240 300 360 395
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt;     misc feature &lt;221&gt; m=a,t,g or c  &lt;400&gt; 748     gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca     aattggctgg cactttgctg ctgtttaata aatactgac aatgcatgaa tggcagtgtc     ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta     cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat     aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca     gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat     cagtttgggt tcacagcagc ttgtgttcca gaaag  &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 749 ttttttttt cccatacaag atggtttatt ttatcctaca cacagaaaat tgcttatgag</pre>	120 180 240 300 360 395
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatactgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat cagtttgggt tcacagcagc ttgtgttcca gaaag  &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 749 ttttttttt cccatacaag atggtttat ttatcctaca cacagaaaat tgcttatgag tatcacatta ccgctcttgg ttatcagtta acaaaggctg ctaatgaaca gcatcgttat</pre>	120 180 240 300 360 395
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c </pre> <pre> &lt;400&gt; 748 gaattgtaat aagctgttta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgtttaata aatactgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgttta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat cagtttgggt tcacagcagc ttgtgttcca gaaag </pre> <pre> &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;400&gt; 749 tttttttttt cccatacaag atggtttatt ttatcctaca cacagaaaat tgcttatgag tatcacatta ccgctcttgg ttatcagtta acaaaggctg ctaatgaaca gcatcgttat caagttgggt aagagacgcc ctgggagtcc aggcaaatca tgacaacaca gcactttgtt</pre>	120 180 240 300 360 395
<pre>&lt;212&gt; DNA</pre>	120 180 240 300 360 395 60 120 180 240 300 360
<pre> &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 748 gaattgtaat aagctgtta tttacttttg ccccatgagg ctatgaattc ctccaggaca aattggctgg cactttgctg ctgttaata aatatctgac aatgcatgaa tggcagtgtc ctggcagaaa acagaatagt ccaccttgag aggcaacaag tcctaacagc tttttgtta cncagaggct gatccaccct ctctcagaga tcttagaggt ggtgctgaag attgataaat aggacacgaa tgccctaggg tcccttctga catggtgatt atggggcagt gactctggca gggggctgna ggggatcttt gaaaagcaac caaggcccgg ttgagctaat cacttgatat cagtttgggt tcacagcagc ttgtgttcca gaaag  &lt;210&gt; 749 &lt;211&gt; 455 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 749 tttttttttt cccatacaag atggtttat ttatcctaca cacagaaaat tgcttatgag tatcacatta ccgctcttgg ttatcagtta acaaaggctg ctaatgaaca gcatcgttat caagttgggt aagagacgc ctgggagtcc aggcaaatca tgacaacaca gcactttgtt ctgaaatata gctcatctt catcacaca aaggaggta gcccagtccg agagatttcc tggaaagtgg aaaggcaaag aatattccgt gatgtgatcc cagaaaataca gggttaatat </pre>	120 180 240 300 360 395 60 120 180 240 300

<210> 754

<210> 750 <211> 366 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 750 aatttaaaaa gtttatttgt attaaacatt atttcgataa taagatgaca aaggactttt	60
gtccttcaac attgtagctt ctctctgctc attaagtgtc tgccaaggat aatccaccaa	120
ggataatcct gaagacagtg ttagtctttt gatacagata agcattaaca tttgccatcc	180
ccaactgcat tgcatttatt ttctttatta taataattca agcttcatgc ttagatcact	240
agaggacata aaacaaatta naaaatcaac tatactgcat ttacaatgaa tgaggtggtg	300
catttctcct getttctttc tttttttctt catctgttac tgcatataat catcatataa	360
ttttaa	366
<210> 751 <211> 387 <212> DNA <213> Homo sapiens	
<400> 751 gctggcaccc gccacaaggc ccagctaatt tttgtatttt tagtagagac agggtttgat	60
tatgttggac aggctggtct caaactcctg acttcaagtg atccacccgc ctcggcctcc	120
caacgtgatg ggactataga catgagccat cagtgcttgg ccttcttgat tcttgaatac	180
ggggtttgag gtgaaagcat ttcatgaaaa cttaagttca tacacaagag catcatgaat	240
attctaaaag aggtatctgt gcttttttt gtgaccacaa aatattactt cttatgaaat	300
gtttacacta ggtgaggaaa agttcattaa ttacctttaa accgttcctt attttttta	360
agattttaaa ttgtattttg gcttttg	387
<210> 752 <211> 403 <212> DNA <213> Homo sapiens	
<400> 752 gtgcagtggc gcgatcttgg ctcactgcaa gctccgcctc ctgggttcac accattctcc	60
agecteagee teccaagetg etgggactae aggegeeeae caccaegeea agetaatttt	120
ttgtattttt ttagtagaga cagggtttca ctgtgttagc caggatggtc tcaatctccc	180
aaccttgtga tccacccacc tcggcctccc aaagtgctgg gattacaggc gtgacacttg	240
tgcctggact aaaacaatgc tttctaaagc gcattctgca gcctgatgtg cctgtgaggt	300
gagaggtgtg ggagggacag aagctttgtt caaagaggtt tgggagaggc tggatactta	360
gctcccttct tgtaagtttg ccacacacat tggcatatta aaa	403
<210> 753 <211> 323 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 753 gtgacatgtt ttttgcttta ttgaaattct ctcttacaaa aggtctgang tattttaggc	60
caggeetaat ttgetttggt ceetgaaatg caggeecatg gteattteea tgteetetga	120
agtaggtatg taaactagta gacttccatt tttaaggttc acacactttt taacattgtt	180
tttatttgat gtaaaacaag acttatgttg tccctaatgg aaagaccaag taagagagtt	240
atgtgcgtct tcatggaagg gataactgga ttctttgcca gaaccgggtt gggaatttag	300
tttgttcaat gtggcatctt tca	323

<211> 445 <212> DNA <213> Homo sapiens	
<400 > 754	60
ttttaattg aagaaatttt ttaattaaaa aacattttt tgacggcttc ttgttgagca gggctacccc acaggccatg tgcctagagt ggccttaatt gaaatttttg ttacaatcat	120
tgtagattcc tgtacagtta taagaaataa aacagccggg cgcggtggct catgcctgca	180
atcccagcac catgggaggc cgagacgggc ggatgacgag gtcaggagac cgagaccatc	240
ctggccaaca cggtgaagcc ccgcctctac caaaaataca aaaaaaccag acgggcgagg	300
cggcgggcgc ttgcaagtcc cagctactcg ggaggctgag gcaggagaac ggtgtgaacc	360
caggaggegg cttgcaageg agccaacace gegecacege actecagece gggegacaga	420
qcqtctccaa aaaaaaaaaa aaaaa	445
<210> 755 <211> 418 <212> DNA <213> Homo sapiens	
<400> 755 ttttttttt ttttttgct agtaactgtt tatttcactc tatacatttg gaaacgtccg	60
ctacatagct atggtcactg tgaccacaaa caacagatgg tgataaagca ctgaacagga	120
agaaaaatgc attccaccct caaaagaaat gaaccagtgt ttataaagac aacagataca	180
gccttcatcc ttaacaaata tatttctttc ccagtatttc cccaatataa acactgaaga	240
gtgtttatat atattcagtg caaggaatag tatcattggt acaactggac cacctctgga	300
gaaagaatga aattgaaaca tctgtttctg aatacatttc agtgtggtgt aataatatta	360
cactatagtg atgtgggaga ggctcctcta gcacccatct gcattccaca tggaaaaa	418
<210> 756 <211> 293 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 756 ttatgaaaaa tccaaagttt attgcaaatt gtattttgct tcccttcgtt cttcattttt	60
acaggattta ttgatatcca tgattttttc acagatgtac ttgttgactt tggagagtct	120
ctgtgcaatt tcagtttcat ccacagtttc ttgtgctatt ctgtcataca aacactctct	180
gacgatgett agtttgtgag gegagagggg tggtttaggg actgeatett tettttttt	240
tgtggcgacg ctggtngacg cttctgtttt tcagaacatc ctgttcccca aac	293
<210> 757 <211> 330 <212> DNA <213> Homo sapiens	
<400> 757 agatagtagg atttatttta atttttcaat ctgaaaaaaa aaaaacccaa aacaaaaaaa	60
aacaaactat cctcatatat atatatacag tgtcaacatt ttcagagcac ttacattagg	120
aaacattgtt tctcttcaac tgtatgacaa tactgtatat gccacaataa aatttacaaa	180
aacaatcgca tcagcagtca taacaaacat catgatttta catttcaata cacaagaaaa	240
aaaatagaca tetteeegge acttggetee egeetgaegg caaegtetee teeacaettt	300
gagagacete agettttaaa acceageage	330
<pre>&lt;210&gt; 758 &lt;211&gt; 150 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 758	

```
60
qaqqqcqqqq qggtcatqcq ctcqccccc cqgqaqcaqq gggtccaqct tqtcqaqtcc
                                                                           120
qqqqcqccac ttccgagtcc tgggcaccct cgggggggaa tcccgggggc cgcgncgtcg
                                                                           150
tctgagttcc tgggcacact cggggagggg
       759
431
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 759 gagtggcagc agtgaggttt attggagcat cctaatacag acgctggggc ttgcattggt
                                                                            60
gctcttgatg tacagagccc gcacgttttg ccagtttttc ttaagcaagg acaccaagaa
                                                                           120
attgacagcc agatgaatgt tgtagactag ctcatcatcg gtcatcttca cgtggccaac
                                                                           180
agegacggcc aaacacagca cettetteat etggaacttg attgtegatt teaceteate
                                                                           240
cactttggcc accatgtttt cattgtgtgt cagcagggag gggaacttgc cagccttgtt
                                                                           300
taggcctggg cccaggatac gtgggatctg cttaatcaga gactcagagg ccaaaaaaggc
                                                                           360
                                                                           420
atcqtacttc ttagccagct tcttgaccaa cttcttgttt ttgttaagct tcttgagcgc
                                                                           431
ctcgatgtcc n
       760
365
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 760 gggttaaatg atttcttatt tattttaaaa tatgataatt atggcatgag tcccaacagt
                                                                            60
gagaggatgt atctgtaagt tactccacac ttttcaatta acatgaacat tttttagtag
                                                                           120
gcatatatct caatacttgg ataatcactt ttgttttgct tgtgttnctn aggaanaaan
                                                                           180
nntttnnatg nnagccagag aattaccttc agntgtntna cgngacaagg tanatnaatg
                                                                           240
ngggaatgca tattcccaat acctaaagat agatngntga gctcagaata ttactcagtc
                                                                           300
ctaggagtaa tttttcttc ttttcctccc ttnaacactc cattggaact aactgagtaa
                                                                           360
                                                                           365
aggca
        Homo sapiens
<400> 761 aaggttgaaa ttaggaattt cttttttatt ggccactaaa gtcctagcaa gtttctgaca
                                                                            60
                                                                           120
gaagcacaga cagaaaatgg aaacaaatac cttactggga atgtttcctt gcttgcacta
accttgacta cagcaataac gcattgctta acagtcaaag tgcaccaggt catttccgca
                                                                           180
aatggcaggg tgagtgactg tgccgttccc aaggaagcaa aacagacaca aacaggtccc
                                                                           240
                                                                           300
acqcqctqqq tgtcctggct gagtacagag gaggctgcta gaccggcagt acccttttcc
caagtgagga aagccagctg tgacactctg cttgccggca ggggttcccc accctcccct
                                                                           360
                                                                           397
ccaccatctg gcccatagct gtaccaccaa ttacatt
       762
621
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} ^{762} ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt
                                                                            60
```

ggctcactgc aacctccacc	tcccaggttc	aagcaattct	ccccacctca	gcctccaaag	120
tagctgggat tacaggcatg	cgcaaccatg	cccagctaat	ttttgtaatt	ttagtagaga	180
tgggttttcg cttagtagag	atggggtgtt	tgccaggctg	gtcccgaact	cctgacctca	240
ggtgatccgc ccacctcggc	ctcccaaagt	gctggggtta	caggcttaag	ccaccaagcc	300
cggccgacct tcttctattt	ttccattctc	ctttccaaag	ccatggccat	gcgctcctgt	360
gtacaggtgc ataaacacat	cagtgtgcca	tccctcacat	gcatgtcgtt	ccccacccct	420
ccttcccagg gcttctcttg	gctccagcgt	tcctctggga	ccctctgcag	atacagcctg	480
tgctggaccc ccagccaggg	tgaaggctca	ttctgctctg	tcttccccaa	tgcctcagtt	540
tccccaaaag ctgnttcagt	ccttctagta	aggggctcca	tggggcaang	atcccttang	600
attaatcttc cncttgggga	g				621
<210> 763 <211> 440 <212> DNA <213> Homo sapiens					
<400> 763					
ttttctaaaa aaatttttt					60
aaagcaacta taccaaaaca					120
ttcagcttat aggatgacac					180
gacttgtgtc tgcgttgctt					240
gaatttgtct ttacaggacc					300
gccttgagtt ctgtgtgatc					360
tgacgtagcc caagttgcac	agcagagttg	ctgttctgga	aacactgtgc	cgagtgacca	420
ccgaccttca cagtgctagt					440
<pre>&lt;210&gt; 764 &lt;211&gt; 347 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 764 ggttcttttt acatgtagca	ggcttattta	ttgttaaatt	acananacaa	tactacnatt	60
acnacagatt aactcagcaa					120
ccctttccgt tgttaaaatt					180
ccccagaaat gtcattttct	taattctctg	tgtgttatat	attgttttct	cctattcact	240
caaatataat cacnaaatcc	aatatacagg	agagaataaa	ggcagtaaaa	agaaataata	300
tacagagtat gataaatatt	ttttaaaaga	gagaaaatat	atactgg		347
<210> 765 <211> 431 <212> DNA <213> Homo sapiens					
<400> 765 tttttgaggg aacatcatgt	ctttatttga	ttaatacatt	cttcaatatc	ggcaacttaa	60
ggcagaggcc acgtgtcaaa	cttctttgta	tgtttctagc	acctttcaca	atgcatggtt	120
catggcaagt acaacaaatg	attgaattcg	attaaatgta	ggaaaatgac	aagattacct	180
tttccaatat gtcgcctagt					240
cccaagcaga atctactttt					300
gtagaagatg catgaaaagc					360
caccaatgtt taggctcttc	ataggcaaca	ggctgaacat	ccctgctggg	atatactggg	420
cataatccgg a					431
<210> 766 <211> 471 <212> DNA <213> Homo sapiens					

## misc feature n=a,t,g or c $^{<400>}$ 766 ttttttgtaa gtaaaaccag tgagtctctt aaagacgctt ttccgactgt ccggtgcaga 60 gagggeeeeg gateggeeee teatteetee tegtetteet ettetteate ategteetee 120 tcgtcggcct tgtccgcggc anagttggcg gcggcagagg gcacggcgcc ctcgggagct 180 geggeggeag teggacette gteettatge tetttettee actteatgeg geggttetgg 240 aaccagatct taatctggcg ctcggtgagg cagagcgccg tgggcgattt caatgcggcg 300 qccnqtacaa qqqtaaqcqq ttgaaqtgga actccttctc cagcttccaa cgtncttggg 360 420 tanccccgtg taaggttttg gcgggccccg gtttcctggt caaaggtccc tnaagaacgg 471 aaatccaggg gtaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g 767 381 DNA Homo sapiens <400> 767 ctgaattaaa gagatgaatt tattggtaaa tagataaaat taacacctat tttaatatat 60 ccaaacccct tccttatata tattaggtaa attaaaagaa aaaaattatc aaagcaatac 120 tacagccagc tagatcgcca atttacaaat gagttaagta agtaccataa gtttgtttga 180 atatcaggtg cttcagagtt tttctcaaac agttacaaaa gagattaggt tcccaatcag 240 ttcacaaaag ctaatttaga gaatgtagct taactacagt actgaggttg tcacacactt 300 aactttcggt ctcttgctta tttattcata tctgaggttc actgtttcta ctaggataca 360 ttccgcccac acccacacct c 381 <400> 768 ctggatcttg ctctagtgtg agcactcctg aacttcacat attctccttg tcccaaatgc 60 aagggtttac tctcaagaga ctctaggctc actgcccata aacctttgag ttggaccaaa 120 180 tettaacate eetgtggatt tgeteataet geeetgggea gaactettte ettetttgga agtctgaatt acttcatatt tgacatctat tttgaaattc tgttttacag ggtttaggat 240 gggggtaggt aggcacagga aagagagtag agcattetet ettttetage aattteeatt 300 346 atcatqcccc ttctaqcttt taqaccaqca gttctgagac agggat Homo sapiens <400> 769 tacaatggct ctgaaaaaaa tttattgatg gatctgagaa ttttttcaca catgaatcat 60 ttctccttcc aatggttatt gatactgata gaagttcccc gctgagactc cctggaccca 120 tggtttgtgc ctgctgggca tcccactatg ctgattccta ctctaaaaga cacttacagc 180 agaaagcatt cacccatgac cattatgaag gaaatattct gtccctcact caccctctgg 240 aagctaatat ggagcagcag tcactctatc cagagccaca tgttcacagt tctctagcaa 300 360 gcaggtcaca ccccgtgggt cccctattcc ccgtgaccct tgttgatcca tcctcttcct 390 gctcagttgc tcccctgctc acctggactg 770 370 DNA Homo sapiens <400> 770 tttttttta caggtggcac tgtttattat tgagtttcat attttatatt gtgtatttta 60 tatttataat tagtactagt tacacatatg acatggactt cttcaaatca aattcccagt 120

```
180
tatqaaqctc tgcaqagacc gttcccacag cctgactaca aagatcaggc acctgaagac
gcatgtcctg atggatacat tcagtgctgg ctgaaaagcc aacttcagtg tgtgccctac
                                                                         240
                                                                         300
cactgtggat atttaaataa aacaacggtt tttcaaacca tgagtcagct ggaaggatgc
                                                                         360
ccacgccacg cacactgcag cactgggage tgcactgggt ggacgggaag gacgcaaact
                                                                         370
ccaagcagct
       771
403
DNA
       Homo sapiens
<400> 771
attaatgcaa acatatttt attaaagaat gaatgcattt atgctaaaga atagcttaca
                                                                          60
tatgttgtaa agcaacaagc atatcttcaa gaagtgagtc ctcctcaata tgactccatg
                                                                         120
                                                                         180
cttattctac atgcctgaaa actgggccca cacacagggg cacacgtaca cgcacacaaa
cqcaqatacq qacacacaqa tatgcagacc gaaatgctga caccatcgct ctctagattg
                                                                         240
qattaqctct catttaaqqc ttcttaqqtq ccgcaqtqcc cctaatatta ccaqqattqa
                                                                         300
aaacagactt ttaggaagga gcagcattac ttcgaaaagt agtcatctgc tcttgtcctc
                                                                         360
caatgtgtgt attttaacaa ataccattta attctatgtt gac
                                                                         403
       772
504
DNA
Homo sapiens
<400> 772
ttttttttc gctacaaatc aaaaggcttt attccttata taaacccaca cttagaaaaa
                                                                          60
ataaatagtt aataaattat aggcaaacca gttggtctca gccacgcctc ccactgaggt
                                                                         120
ccagggcagc cgctgcagca gcagacgagc gggaaggtgt ggccacagct tggctcaagg
                                                                         180
                                                                         240
gcgtggtctg gactggggac gaagggacag aggaggaagg caaggtctgg gtgagggcag
ggatggggc taaaggtggg ttcctgaggc gtgcccaggc tctggcccgg gcagcagggg
                                                                         300
tgaggcaggg gctcagctcc tcctgggcct gggtgatgcg gcgtgcgaac ggctgcgatc
                                                                         360
ccgagcaagc tgctcccagg ggccctggcg ggcgcctgg ggcgcctctg cccagacagc
                                                                         420
caggaaatgg acagtgacct tctcggagaa gcgcaccttt ctggccttta ggggagtctc
                                                                         480
agggtccgga tcatgagtag gggt
                                                                         504
       773
427
DNA
Homo sapiens
^{<\!400>} 773 tttaacatt aagacagctt ttattaaata caaaagcaaa ataagctcta aggagtaagg
                                                                          60
                                                                         120
tagggctact taagggcgtt ttctgtggac agcggacaca gcaccattaa ggttagctta
gatttgaaca aaccatgagc agacagctaa ctacatgtta tgtttctctt agtagtttta
                                                                         180
gggtctgccc agtaatcaag aaattttact tctccagaat acatgaacat gggaaccaaa
                                                                         240
                                                                         300
gaaatgtaaa tatttcgaaa aagcactaca caataaaatg agacgcaatc cttatgcagg
tcaagatgtt ctccacatct acaatgtgca ttaacaaaat taatgcagat aagaccttca
                                                                         360
ctccaacccc aaagatctta catggttaat actattttcc aaaatcagca gaacaagctg
                                                                         420
                                                                         427
cagttac
       774
362
DNA
Homo sapiens
^{<400>} 774 aagatotata aatatatta ttataatata acaagaactt aacagtaaac atatactatg
                                                                          60
tacaatacca ttacagagaa ccctgtttta tatcattcac agaaatagcc agttttgctc
                                                                         120
cagtgtgata gatgaggaga gaaacgaatt tcaatgtcat ctgtgttgag tctcgctgac
                                                                         180
aactagaacc teetttggeg teagaegeac accaatgeta acattageec tgeeceagge
                                                                         240
agttaggaat ttgtgctcca gtccttgggt tcacacttgc accctgtttg acataaatac
                                                                         300
```

tttaaatg	gac	atacaatgta	tgtagttttg	tgcttattac	tttttaaaat	aataaataat	360
at							362
<211> 4 <212> I	775 176 DNA Homo	sapiens					
<400> 7	775 ttt	ttatgatttc	acattaagtt	gtctaatttg	ctttgtggtg	gtgggttcat	60
cccggtac	cta	cccataaacg	aatcagtaaa	tgagacttag	tttccaacct	tacttcccga	120
					ccaagttcta		180
agtcctca	atg	ctttagcccc	agcctctgag	cttagcagaa	gacattttgg	gtccttatat	240
					atcttacagg		300
ttaccate	gat	gtgtcttata	aggaagactt	gccaggcaaa	ttttcgggca	agccagcaaa	360
atagttaa	aag	taagagtaaa	gaggaacacg	tgaatgatgg	ggagttggtc	taggaaaata	420
ttgtgagg	gaa	aataaatgaa	attctatggt	tagccaaata	gacaaagata	gcttct	476
<211> (212) I	776 153 DNA Homo	sapiens					
<400> tgggtttg	776 gaa	aacatgtatt	attagaggca	catgtttaaa	aacaagtaca	gtatgaaatc	60
ttcctttt	tca	gtgagccagt	gaattttcat	tcgtttgttt	gtttctatga	atatttggtt	120
tacttcct	ttc	ttctgggcaa	gattagtatg	caa			153
<211> 4 <212> 1	777 486 DNA Homo	o sapiens					
<400>	777 att	tcaatgccat	aaagcttaca	ttcccttgaa	gcagagtaca	ggaaacctta	60
					ctgtatcagc		120
-					agaggggata		180
					cctactcttt		240
					tacatacata		300
					taaatctaaa		360
					tgtgtatgct		420
					aaatggctat		480
ggggaa		JJJ		33 3 3			486
<211> <212>	778 307 DNA Homo	o sapiens					
<400> attaata	778 att	ctctatttat	taaaaagggt	cctacagctt	tacagccaca	gcaccggaca	60
					ttgcaacttc		120
tcacgtc	tgg	ctgcgaccgt	ggcaggctgt	ggcatccccg	acagcggccg	gtggcggagg	180
tatgggg	gcg	ggtggcaccg	ctcactcgag	attcacagaa	catggcaagc	ccgcctgact	240
ggcatgg	cag	tgaatcgtcc	tgtacagctt	catttcaaga	aaacagttaa	cagtaggagt	300
tcaaagt							307
<212>	779 228 DNA Homo	o sapiens					
<400> gaccaca	779 gaa	gtttttattq	ccctcctgct	ccgcaaaggg	accttgcttc	tgctggttta	60
_						ctatcctgtg	120

	tggatgc tttacaggt tcttcta agcaggcgg			caccaagatt	180 228
<210> 780 <211> 427 <212> DNA					
<212> DNA <213> Homo sa	piens				
<400> 780 aacagtgaga tcc	accttta ttgaaacat	c acacggcagc	atcagggctc	ccacacctca	60
	agttcac aggacagca				120
	tcacagg gcttcgggg				180
	cacagag cttcagggg				240
	cagggcc ctgtatgca				300
	ctggggc cccggggaa				360
	gcaggag ctcagcctt				420
ggctctt					427
<210> 781 <211> 491 <212> DNA <213> Homo sa	niens				
~400> 781					
attttttccg aag	tgaaaca cgcagcttt				60
	tacatta tggagcccg				120
	gagaggt cctgccagg				180
	tcagaag cggccatgo				240
	gccagta tggaaccto				300
	gaggttc tgggaaatg				360
	ccgtgca cacctgcc				420
ccgctcttca atc	tctccct ccggaactt	g acatagacgt	tggccacgag	gtggtcccca	480
aggttgtcgc a					491
<210> 782 <211> 434 <212> DNA <213> Homo sa					
	piens				
<400> 782 tttttatttt caa	tcaaatt tcttttaa	at gaaaactaat	ttttaagggc	aagataccac	60
agcagaagaa aaa	cctcttg caagaaaa	ga cttcatggtt	tacaacgatc	aaatgtatgg	120
gctatttgcc tga	ttggtgg cctggacto	a gcaagagatt	cctttgcagc	agaggttggc	180
	gctgcaa caccactg				240
aaaaagcaga gtg	cctaaac ttgtccati	t ccaccaagaa	aaaaagtttc	atagcaacct	300
tccttcacca gaa	aggetta etttatgai	a tgctaacaga	acagaaaagc	aggttgggac	360
aagatacaga ctt	tgttgca tttagcta	g accettetet	cccctctgtg	gatgtgggca	420
gggtggggag agg	ic				434
<210> 783 <211> 238 <212> DNA <213> Homo sa	piens				
<400> 783	attettt ttatttgag	ga aggatgatet	caaggcagtg	cccgtttggg	60
	catcatca tgtacatca				120
	gtgactt ccgtacaa				180
	gtcactt agtagtca				238
<210> 784 <211> 434 <212> DNA					

<213> Homo sapiens	
-100 791	
tttttgggta gggatggtat gaatttaata ttttttagta ttacaatata ttcttataaa	60
aaaggtgcaa gtgaaaaagg acactgtaga ttatgtccat tagcctcatt tgtcatctga	120
ggcagctggt gagaacagcc ttgggtcgaa ggcatccctg gtagaagtcg ggggagatag	180
atagtcacag ttccccagtt ggtggaaatg ggatgggagt agggagaggc tggaacagac	240
ccttccccat tcacctggag aattttctcc tcccactgcc ctaaacactt tatttccatc	300
acaggggaga aatgctgctg agaaggttgt gtttgttagg ttgatgacga attttacatt	360
ggccacaaaa ttagctagag aaacttatct aaaggtggca ggagcagtgg ggagggcatg	420
aagaaagcaa gacc	434
<210> 785 <211> 404	
<212> DNA .	
<del>-</del>	
<220> <221> misc feature <223> n=a,t,q or c	
<400> 785 ttactgacac acagctgtat tgtttatttg ctgatgtgag tattacggta ctcatccttt	60
tgtgcatgta aggactcatt tctcctggat gtgtaagcaa gagtggaaat gctaggccat	120
agggtagatg cgtatttaac ttgatgagaa gctgttcagt ttcctgccgt gggtgcaaca	180
aagcacattt gcaccagcag cgcctgggag ctgctcttct ccgtatcccc accagcactt	240
ggtactggca gaccttctcc tctgagctat tctgatagtg gggcagtgcg atttcacggt	300
ttttaatgag atgtggagca cttttcagag gctggcctgg tttttgtagc tgccctaggc	360
acnetegagg agggatggga ggggggttgg tgaagaggat gtte	404
<210> 786 <211> 621 5212 621	
$\langle \overline{2}\overline{1}\overline{2} \rangle = \overline{D}\overline{N}\overline{A}$ $\langle 213 \rangle = \overline{Homo}$ sapiens	
<400> 786 aagtttettg gaaatttttt tatteteett gecaacattt ettttgacat tttattaett	60
aattatgtga cattaagaaa taatttggtt gcatattatt ttcaaaaagc agtaagaaag	120
tagctattga gaaagaagga gggccatagg tttttcaata aaacgttaga aacattataa	180
aaaacgagac tcccattaca tggaaacaca tgatcaaaga tcagactaac acacattcaa	240
acaggettgg ttegaaatag agtteteeat ttettteaga tgageetttt ttettagget	300
ctttcagaag cacttcacaa tgaacagagg tcttgccagc tcatttcatt	360
caaaggtatg atggcagaat catgagaaga tggaaataag gcctgaggat atggcttgat	420
c	421
<210> 787 <211> 339 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 787	60
titttagaa aagaagttgt ttttatttta attcaagagg gttggaaaca taaaaacagt	120
acattttcct tgcagaaaat taccccattt aaattactat ttggtacaga gattatttat tacactgcat tttaggcaat tttctaacat taagtgacaa gttatacttt tgatttttt	180
tttcacattg gagctattat gatttgcact cataatacca aagctactga actcaccaat	240
ttttttctta gtaattaaaa aaaagcacac agaaaatata actacaatta gattaacttt	300
	339
atcaaaagta actctttcag accaaacatc cagcaaaac	
<210> 788 <211> 368	
<210> 788 <211> 368 <212> DNA <213> Homo sapiens	
<4.00 788	<i></i>
ttaaagttt ttttcagttt attatttcat gatccctagt caaacactga taccccaaaa	60

taggattttc cttcct					120
ttctggatgc tgctct					180
ggatgttgca gatgtg					240
ggccctttct ggccgt	agct ggtactagat	tttgataaaa	gtatcctaat	actcagggac	300
tatttctcaa agacca	agaat cccaagagcc	agagactgga	tgagagacac	caagcacaag	360
acagcaat					368
010 500					
<210> 789 <211> 337					
<212> DNA <213> Homo sapie	ens				
<400> 789			0.0+ 0+ 0+ 0.00	agagatagag	60
titttttttg tagtto					120
aaggaaaagg accaga					180
tetgetgeee tggget					
ctcatgaagc ccagat					240
gaagaccacc aggtca			ggtcttcttt	gaagaaactt	300
acttcttgca agccct	tggca tcttccaatt	ggctgtc			337
<210> 790					
<211> 412					
<212> DNA <213> Homo sapie	ens				
<400> 790 tttaacaaaa tgctt	tattt ctatttttaa	atgagaggca	ttcccatgaa	atatcaaaaq	60
gcatttacat gtgtt					120
ctgctgaaat agagc					180
gaatcgctat ttgct					240
gacgctggct ccatg					300
atagtgacgt tggtag					360
ataggtgatg tcatc					412
alaygigaly claic	cccaa accedect	geeddageee	acgoagagaa		
<210> 791 <211> 346					
<212> DNA					
<del></del>	ens				
<400> 791 tgcggccgcc ctccg	tggaa aaccggccaa	a agatctcagc	cttcctgccc	gcccggcagc	60
tctggaagtg gtcgg	ggaat cccacacag	ggcgtggcat	gaaggggaag	gcccggaagc	120
tgttctacaa ggcca					180
tectgtcage tgggc	ggccc aacctcccct	acatcggccg	catcgagagc	atgtgggagt	240
cgtggggcag caaca					300
tgggcaagag gcagt					346
<210> 792 <211> 443					
<212> DNA <213> Homo sapi	ens				
<400> 792				atastsaaaa	60
gacagacatt caaga					
tcatgctgtc ttata					120 180
actttttctc cagac					240
tttcgaaatg cattc					300
aaaattcttc aatag					
agctccttct ctctg					360
aaaacaggta gaatt		t tgtcattaat	atactcgtaa	taaaataaag	420
cttgttctga aacca	.caagg ggt				443

<210> 793 <211> 453 <212> DNA <213> Homo sapiens	
<400> 793 tttttttttt ttcattgtac aatatcttta ttaaagaaat gcattccagc aacactgtca	60
gcatctttat taccaaagaa atacataact ttaacagata atctctgtat cttagttttt	120
gcctttgcaa aacaaatgga gatatatcaa ctctcataca attctaaaag cattgtgctg	180
tgctgcctca caggggtacg ttcccagagg tttctctctc tagagcaatc cctaatagga	240
caattgttca ctctgaggct tctggcttct tatctctcct ctcttgggga gctgctgctt	300
ctctgtaggt tgcttccctg tgacgcaggg accatagttt ctgctctaat aacacctttt	360
ccactctgac gtagctgagc catacactac attgccttag tcctgttcac cctttggtga	420
ttetgtteea tttgeeacet ggeetettee tee	453
<210> 794 <211> 422 <212> DNA <213> Homo sapiens	
<400> 794 tttaacaatt gcaaagattt tatttagcgg ctttctgtgc ttggccttag aaacagagtt	60
ccgtgcataa gggcaaattt ttgtacacct tttcttcata catattttac ataccetttt	120
attgcccct ttttcatatt cataatattg gattccccac taggcacata aatacattta	180
tctacaacac ctcaaaacca gaaactttaa taatatctgt attattttac ttggtattat	240
ttgcatttcc acaccattta aaaattttag cttgcaccaa gcttcacttg ctttcttacc	300
attaaaagat ttgaagggaa agggaaagat gaaggacaaa acccaaaact tcaaaatgca	360
atgtactatt tgataaaaat ggagatctaa gggcaggtag aagggtatag aagacccatc	420
tg	422
<210> 795 <211> 514 <212> DNA <213> Homo sapiens	
<400> 795 agaacaaaat atatggtatt tattaaacac atgtgacata ggttataata tcaaagtaga	60
gcatgcatga acagatgatt cattcgttta acaaaaacac caattgatac tgagaacact	120
aaattattaa atttccaaga catataaaat tctctttaag ttaaagtgag aaagaaaaaa	180
aaatcacaag ttgaataaat acagtgattt cagctggtcc aatgaaagca taaggcacaa	240
attaaaccaa gggactagcg catcagaatg aagcttgtct ggcccacaca agtctctcag	300
tgtggctccc acgaccctgc acagatgctt gggaccaaga ggaaagagca cctgcaggcc	360
gggaaccctc ccttccaggt tcaagtttgg ctgggtgccc atgcttcttg tggacaggcc	420
tctctgtatc agagaaacgc tgcctctaat acttttatgg gtaaacaaaa ccttcatgct	480
ctatcaaaca atcctggcat gaataacatg aaac	514
<210> 796 <211> 401 <212> DNA <213> Homo sapiens	
<400> 796 ttttacattt ggaaaatata ctttattcaa taatataaac aatgtagtag atatatttga	60
ttatttaata atcattttaa gtttattgta cagatgcaca tgtcaataat tagtgttttt	120
cagatgggat gatatacatt ctgcttttat ttttatctct ttggtaacaa ttattgacag	180
aacaatgaaa caaagataaa ttgttttaca gttgtaatac ccttgtatgg taattctcag	240
cctcttttat cttatattct actagcactt acatctaata ggtctcaata aagtagaaat	300
gtaaaagtat gtattttcag aaaaggtcat atttcataaa gattctgtta ctatgttagt	360
catttatcat aagtgttaag tctaagaaaa gttgtaatag a	401
<210> 797 <211> 408	

<212> DNA <213> Homo sapiens	
-	
<pre>&lt;400&gt; 797 ttcattttgc aaatttaatg taactctgat accaaaatat gacagcacac ag</pre>	
caataaagca ggaacagcaa acagattttt ccatcacatg acaccctcag ct	
ataactgcct tgactgctgt gtggacaaag attccaagga tgtactttgg ct	
aggactactg caatttatta gcggtatctg taaacatggg gaataaatct ga	
tagccatacg agaagccaca ggcaccaaga ctggcggctc cactgccaaa gc	
gtgctcggtc caccaccaaa gccagcacca gtgtttggtc caccgccgaa gc	
gtgctcggtc caccgctgaa gccactggtg cttggtccac tgcagaag	408
<210> 798 <211> 175 <212> DNA <213> Homo sapiens	
4005 799	
titagaatgt tcatagcagc tttattcata atagccaaaa ctggaaacag co	
tagtaacaga atgagtaatt tatacaattc aatactgtat acaacagtat ga	
actacaacat gcaacaatac agatgagttg tatagacata ctgttgagtc as	aaga 175
<210> 799 <211> 478 <212> DNA <213> Homo sapiens	
<400> 799 ttttcccagt ttcaggtacg tctttattag cagtgtgaaa atgaactaat ac	cagactgga 60
agcettgtga caggaaaact gaacatetga gacatetata ggaaaaaaag at	
atccagtcct tggagttcca gtagactgat ttattcacca acagcattgc to	
ccattccagg agacaggcac cccagaagta gcaggactgg tagacatcac ta	
tatgtgttgt gcatgtatgt gtgttgaaga agaggatggg gaaaacaatg at	tggtggtca 300
ccaggtaaga tgggacccag gaagggattg caagtccagg ccccatgaac a	cccccaaag 360
aatgcccctc ctcttggaaa taaaagtggt tctggatcca gggagatcaa ca	agttgcaag 420
ctgatattaa gagttgtcta ttggatctgt tctaagggat atgttatgtg aa	agccaat 478
<210> 800 <211> 408 <212> DNA <213> Homo sapiens	
<400> 800 atcttaattta acacatatag tacacatttt cagtcatttc at	tcatcatcc 60
aagtacatta agatacatac ccatgtatat tacaaggctt attgttcact ca	
cettetact tracetere attectigaa greteratte teatraatte g	
tacagteete tttteagttt etteagatgg ggatatgeag atgatagatt e	ttggaatcc 240
tttctgcatc cctttcactc tggcaggtga atgatgcttg gctggaaaga g	acttcttgg 300
ttactttcct tttctcttaa caggtataga tatgattcca ctgtctgata c	cagtccaat 360
tetttteeca ttgeaaataa ettetttetg tetggaatet tatatatt	408
<210> 801 <211> 110 <212> DNA <213> Homo sapiens	
<400> 801 gatccctga gttgccctgg tctctgcacc ttctaaacct agttcttaag ag	gctttccat 60
tacatgaget gtetcaaage cetecaataa atteteagtg taagettetg	110
<210> 802 <211> 223 <212> DNA <213> Homo sapiens	
<400> 802 cagaaaacta aagcagcacc tttattttat acatacaaac agtataaaat g	tttattagg 60

Laagagetgt	gttttsttta	caatatatta	tatybscttc	avrcgccaat	gcaaaavvgt	120
tcatacatta	tattccctat	ttcattgtgt	ttagaatata	ttatattgtt	taaatgmcac	180
taccacagtg	taatttttt	ttttttaata	ctgaatctct	gga		223
<210> 803 <211> 293 <212> DNA <213> Homo	o sapiens					
<400> 803	atctttattg	ayqcqtqqac	actcctbccc	ctccagcccc	gccccccagc	60
	ctagaaagcg					120
	gggggaggtg					180
	aagtgggttt					240
	cccaagggga					293
<210> 804 <211> 517 <212> DNA <213> Home	o sapiens					
<400> 804 ccaaatttca	aaaagtttta	ttttgaaaga	atgagagaaa	taaaacagag	aggtatcaat	60
	aattacactg					120
	atccctggca					180
	cgtaatgaaa					240
	tccccagct					300
_	gacttggaac					360
gtagtgaatc	tgtttggcag	tgaacactgg	atatagcttc	tttttcaaat	tttggatgat	420
	aggtagagtt					480
_	cagtggggba					517
010 005						
<210> 805 <211> 229 <212> DNA <213> Hom	o sapiens					
<212> DNA <213> Hom		taatttctaa	agcacttata	ttattatggc	atggttttgg	60
<212> DNA <213> Hom <400> 805 gcataaaaaa	o sapiens cacaatgvtt ttatagtcca					60 120
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta	cacaatgvtt	cataggtaag	tatgcagtgc	ttctcatgga	aaaaatgctt	
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta aggtattggc	cacaatgvtt ttatagtcca	cataggtaag gaaaccatat	tatgcagtgc ttyycctttt	ttctcatgga ttaataatca	aaaaatgctt	120
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga <210> 806 <211> 293 <212> DNA	cacaatgvtt ttatagtcca cttttctctg	cataggtaag gaaaccatat	tatgcagtgc ttyycctttt	ttctcatgga ttaataatca	aaaaatgctt	120 180
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293 &lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 806</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc	cataggtaag gaaaccatat ttttgatttt	tatgcagtgc ttyycctttt taatatacaa	ttctcatgga ttaataatca gatgctttc	aaaaatgctt actaagatgt	120 180
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga <210> 806 <211> 293 <212> DNA <213> Hom <400> 806 gaaacttcat	cacaatgvtt ttatagtcca cttttctctg crgcctcatc	cataggtaag gaaaccatat ttttgatttt ttttgatttt	tatgcagtgc ttyycctttt taatatacaa caattagtgt	ttctcatgga ttaataatca gatgctttc cttcaaaaat	aaaaatgctt actaagatgt aaagtaagtg	120 180 229
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga <210> 806 <211> 293 <212> DNA <213> Hom <400> 806 gaaacttcat gaagcagaat	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag	tatgcagtgc ttyycctttt taatatacaa caattagtgt caataataaa	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa	aaaaatgctt actaagatgt aaagtaagtg atatttgttt	120 180 229
<212> DNA <213> Hom <400> 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga <210> 806 <211> 293 <211> DNA <213> Hom <400> 806 gaaacttcat gaagcagaat tctgtgtctc	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag tgtattttt	tatgcagtgc ttyyccttt taatatacaa  caattagtgt caataataaa atattttta	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga	aaaaatgctt actaagatgt  aaagtaagtg atatttgttt caaacttttg	120 180 229 60 120
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293 &lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 806 gaaacttcat gaagcagaat tctgtgtctc ctcttgttgc</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc atttttttgt	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag tgtattttt gtgcaatgac	tatgcagtgc ttyyccttt taatatacaa  caattagtgt caataataaa atattttta atgatctcac	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga ctcactgcaa	aaaaatgctt actaagatgt  aaagtaagtg atatttgtt caaacttttg tctccgcctc	120 180 229 60 120 180
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293 &lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 806 gaaacttcat gaagcagaat tctgtgtctc ctcttgttgc ctgggtgcaa &lt;210&gt; 263 &lt;211&gt; 263 &lt;212&gt; DNA</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc attttttgt ccagactgga	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag tgtattttt gtgcaatgac	tatgcagtgc ttyyccttt taatatacaa  caattagtgt caataataaa atattttta atgatctcac	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga ctcactgcaa	aaaaatgctt actaagatgt  aaagtaagtg atatttgtt caaacttttg tctccgcctc	120 180 229 60 120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293 &lt;212&gt; DNA &lt;400&gt; 8 05 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293 &lt;211&gt; DNA &lt;400&gt; 806 gaaacttcat gaagcagaat tctgtgtctc ctcttgttgc ctgggtgcaa &lt;210&gt; 807 &lt;211&gt; DNA &lt;211&gt; DNA &lt;400&gt; 806 &lt;400</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc attttttgt ccagactgga gcaattctcc	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag tgtattttt gtgcaatgac	tatgcagtgc ttyyccttt taatatacaa  caattagtgt caataataaa atattttta atgatctcac	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga ctcactgcaa	aaaaatgctt actaagatgt  aaagtaagtg atatttgtt caaacttttg tctccgcctc	120 180 229 60 120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; 293A &lt;211&gt; DNA &lt;400&gt; 806 &lt;211&gt; 293A &lt;211&gt; DNA &lt;213&gt; Hom &lt;400&gt; 806 caacttcat gaagcagaat tctgtgtctc ctcttgttgc ctgggtgcaa &lt;210&gt; 263 &lt;211&gt; DNA &lt;2112&gt; DNA &lt;2113&gt; Hom &lt;220&gt; &lt;2211&gt; n=a</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc attttttgt ccagactgga gcaattctcc o sapiens	cataggtaag gaaaccatat ttttgatttt ttcagtgtag aactaacaag tgtattttt gtgcaatgac tccctcagcc	tatgcagtgc ttyyccttt taatatacaa  caattagtgt caataataaa atattttta atgatctcac tcccgagtag	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga ctcactgcaa ctgggattac	aaaaatgctt actaagatgt aaagtaagtg atatttgttt caaacttttg tctccgcctc agg	120 180 229 60 120 180 240
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;400&gt; 805 gcataaaaaa vgacaggtta aggtattggc atatgtaaga &lt;210&gt; 806 &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; DNA &lt;213&gt; Hom &lt;400&gt; 806 gaaacttcat gaagcagaat tctgtgtctc ctcttgttgc ctgggtgcaa &lt;210&gt; 807 &lt;2212&gt; DNA &lt;211&gt; DNA &lt;211</pre>	cacaatgvtt ttatagtcca cttttctctg crgcctcatc o sapiens taaggttta tactttaatc attttttgt ccagactgga gcaattctcc o sapiens	cataggtaag gaaaccatat ttttgatttt  ttcagtgtag aactaacaag tgtattttt gtgcaatgac tccctcagcc	tatgcagtgc ttyycctttt taatatacaa  caattagtgt caataataaa atattttta atgatctcac tcccgagtag  gacctaactc	ttctcatgga ttaataatca gatgctttc  cttcaaaaat atgaaacaaa tattttgaga ctcactgcaa ctgggattac  atcctcacat	aaaaatgctt actaagatgt  aaagtaagtg atatttgttt caaacttttg tctccgcctc agg  cgccaggtga	120 180 229 60 120 180 240 293

<400>

811

```
180
aacccagatc caggagggtg ttgtaggcgg tctgctgctc cttcccacta gtgtagccat
tqaaqaqatt ntaqatettg tetgetattt ettgageett gacateatee accaegggge
                                                                            240
atggggtctt cacgatcacg tcg
                                                                            263
       808
289
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 808
ganttgnncc nnngtataaa aatgtacagt ggttttattg acatgtacat tccaatatgt
                                                                             60
                                                                            120
ttacagctgc aagataatga ggcacactca gtattgcact tcattaaaat ttcaggctca
aacttaacct aqaaqtttaa atgaaattgc atttgtaatt tagtaattct tatacaggac
                                                                            180
aaacattgat atgtttatat acagtgtgat acttattaca tttatatgct gtcctaacac
                                                                            240
                                                                            289
aatgttttt ttttttnaa ataacagtct aggggaataa accagaata
       809
402
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 809 gagatacaag gttgaataaa atacagaccc tatcatcaag gataattcta gtgacaatta
                                                                              60
                                                                             120
tatttcacat tatttctgtc aggtcttgat aatattttaa tcacaggaac caccatagca
qtccaqactc attttattat ttatcatctc tcagtaactg ctccgacagt gggcaacaaa
                                                                             180
                                                                             240
qqqtattqaa tacttatatt tcaaatttta aaatttatga taatttggga gggaggtgaa
aaaaccttac tagggaaaga caaacattca ttattctacg gtgtgtgtga ggctcatgtc
                                                                             300
tettaetett ggeateeggg ggnattaagg taeaggeeet engtgtaggg gngtteeett
                                                                             360
                                                                             402
naagggaaac cacctttaat ggcatttnac ccccggcac at
        810
460
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 810 ttaaagacag agtttcgctc ttgttgccca ggctgtagtg caatggcgcg atattggctc
                                                                              60
actqcaaccc ctgcctccca ggttcaagtg attctcctgc ctcaccaagt agctgtgatt
                                                                             120
acaggtaccc gccaccatgg ccagctaatt ttttctattt ttagtagagc cggggtttca
                                                                             180
ccatgttggc caggctggtc tcgaactcct gatctcaggt gatccacctg tcttggcctc
                                                                             240
ccgtgctggg attataggca tgagccacca cgtccggcca aattttactt cttaaaagtg
                                                                            300
cttttctctc agtgatatca aggtcttctg tctactatta taaccataag cttctttagg
                                                                            360
cattaaggag ggaaaatgtt taataaaatg taattaaact gggatggaat ggtcagtgta
                                                                             420
tttaaatgta aatatactta aatgtaatta ccggggnggt
                                                                             460
       811
383
DNA
Homo sapiens
<210><211><2112><213>
        misc feature
n=a,t,g or c
```

```
catgtttatt tgaataattg ccccattgca caataaataa atccgctgag tgtgtttgtt
                                                                          60
tgaatgtttt tacatgtaca tgggatcaca tagtcaaata aatgcagctg tgtttattac
                                                                         120
aatgtgtggg gctccagata tacacacact tgtttgngtg gatatccagg gccctacagc
                                                                         180
ccctgaatgg cctcacacat cttggagcaa aagcatggtt aacaattttt cagttcaaat
                                                                         240
acatgtaaac ttattattgg gcagtctcct caaatttgtg actaagattt gcttttanta
                                                                         300
aggettacat tantagaaag ntaaaaaatg acetttttaa aagttateng attgtgaaaa
                                                                         360
                                                                         383
gtatctaata catttatnca taa
       812
616
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 812 aatgattgtt tttttattaa ataatttctc caaaatactg aaaataacaa ataacattca
                                                                           60
aaaaqcattc aaagaaaaca aaaacatgtc ctcattttat ttggaaataa actcttgttg
                                                                          120
                                                                          180
taggatagaa aggaattagt gtattattgg caacctatga gattctgcac tatttacata
ttgctggtac ctctatgcaa actattgcca aacttctgaa gcttctgttg tcattcaact
                                                                          240
gctgggggag ggctgtatgt gaaagtaacc cgctattaga tggtgccttt aaggatgtaa
                                                                          300
                                                                          360
qcaccacctt cctgtctcct gtttacatac tttacatact ttagtggcaa ggggagattg
                                                                          420
agtaaactaa acctgcgctg acagactcac tgttggaatg agaagggtgg tcagaatggg
aggcagagga taacttcctc tgtaatctca ctgggtcaga gcctcagcaa ccttcactgg
                                                                          480
                                                                          540
cacacaggac cagtetecat etecetette cectaagage aaactggttg gggttetgag
accatcgctg cctggtatga atgcntggta caactataat cctataggta tccatcagca
                                                                          600
                                                                          616
ttctttggnc cccaan
       813
461
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 813 aagaaanacc catttttttc cttaaggact tactagccaa aatttcttaa acttcgagga
                                                                           60
ctctactagc catggccgag ccattcttgt cagaatatca acaccagcct caaactagca
                                                                          120
actgtacagg tgctgctgct gtccaggaag agctgaaccc tgagcgcccc ccaggcgnca
                                                                          180
                                                                          240
cggagcgggt gcccgaggag gacagtaggt ggcaatcgag agcgttcccc cagttgggtg
gccgtccggg gccggacggg gaagggagcc tggaatccca accacctccc ttgcagaccc
                                                                          300
                                                                          360
aggectqtec agaatetage tgeetgagag agggegagaa gggeeagaat ggggaegaet
cgtccgctgg cgcgacttcc cggcncggca gaaagtggag ccgacgcccg aggccgagct
                                                                          420
                                                                          461
gcttgnccag ccttgtcatg actccgaggg cagtaagttg g
       814
368
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 814
nttqcacttq qqqtaataqq tttattatct ctatatacaa gtaagcattt attgatgttt
                                                                           60
gtcaaaaata agagacaaga taacaaaaac tattttagca tgaaaacgag atagctgcaa
                                                                          120
                                                                          180
tagactaata ctgagcttaa agactccaaa aagagcacag aacctgaaat gacagttttc
                                                                          240
aggttqtata qttatccaga caatgaagtc aactatacaa ggcaagcaac acatgacaat
```

aaaacaccat caacagtttc ctangtggga aaaatattta gggaactt					300 360 368
<pre>&lt;210&gt; 815 &lt;211&gt; 454 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>					
<400> 815 gaggaactat tttctttatt	ttcccaagga	tggtacatgg	ctgtgcattn	ctagatgcaa	60
acgtacaatg caaattttcc					120
aattcagggc tcaatgttct					180
aacataatga ggagaaaaac	aaaatatata	tatatatacc	caaacataat	ttccaggggg	240
aaaaaaaccc acaaaatcca	aaatgaaaat	tcactggata	ggattcatag	cagattaaac	300
agcagcaaaa gaaatggtta	tnggggatcg	ggtgtagtgc	ctcacgcctg	caatccaaac	360
actttgggga ggctgaggtg	ggcagacagc	ttgagtccag	gagtttgaga	ccagcttagg	420
caacagggca agacctcatc	tctacaccaa	gtac			454
<210> 816 <211> 599 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 816 tgcttattga tttttttaag	tctgagggaa	attacccaaa	atgtgtcatt	ccttaacatt	60
taaaaatatg ttacataaaa	atgagcaact	gtgataacaa	ataaaacttg	gagagaaaaa	120
agttggctat ttccttattc	aaggagacag	agctaccaga	atacatcaag	atagcgcaca	180
aattttttaa atccactgcc	acttctgctg	aaacaaaagt	caactgataa	gaaaattccc	240
attcaaaaca attttaattg	tactgttaac	tcttcctcca	ttttttaatt	tcatgaagtc	300
ataatccaat ctgagttggt	ctgttgggca	ttagcagaca	tagtcactgg	agaggagtga	360
gatgatgtca gagcatgggg	cacagtattt	ataaatgtct	cctttaagaa	agtgtaagta	420
gtatcaagtt cagctttcaa					480
gaggagctct tgaanggatg					540
acctgcattt tccccgttaa	caagccggtg	tggaagtccg	gtttccaagg	ctgccatnt	599
<210> 817 <211> 491 <212> DNA <213> Homo sapiens					
<400> 817 atacaagaag tattttaatt	attacaaaaa	caaaqqaqqc	aggtactaga	aattctgcat	60
ttcatagaag agtaaaactt					120
ttcatttaaa aagtcctagt					180
aaaatcccta gagatttaaa	aaactgaaga	atttcactat	ctttaaaaga	tattatattt	240
tagtacataa agctattaaa					300
ttcatcattg gaaggtggac					360
ccatgttgat ggcagtaaag	ccattttaca	atgaacttat	gaagtagtaa	cactagccaa	420
acacacagag acacaaatac	caaaaatgat	gtgtttagta	tacacaaata	gctatacttg	480
gggcatgggt t					491
<210> 818 <211> 417					

<400>

821

```
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 818 caaaatgaaa aaaaatttat ttcctcagtg ttttatccac tgtcaatact gtatttttga
                                                                             60
tqcaatatat ttgccaaaag aactcagctt ttattttcca ttttaaacaa ctacaatatt
                                                                            120
                                                                            180
tacaaqctqt tcagaataac actcagacac acacacactc anagacacac gtaagtacat
atgtccttat ctctggttta tactgaatgc tggtaaaggc catgaatact ttccagagcc
                                                                            240
catgatcaga aaaggaaaac ccattttcct ttcttacgtt cactttccta gaatcatttt
                                                                            300
caatatteet cettecattt ceteatgeag agteattgee agaettgtat aggtttaate
                                                                            360
agtttttaca ttttactttt acttaaacta taagctttta aaaagcataa gcagaca
                                                                            417
       819
444
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 819 gcaaanaata gcagccttct attttaatga attttacaca aaatgatcat cctaattgct
                                                                             60
                                                                            120
actctctttt caactacagt gcttacagag aatcattaat tttcagatta acaccatttc
                                                                            180
aatttttatt cttaqqcaac tctattqaca ctttccagtg aaacagtaaa gaacatagag
caaaagcttt aaggtaccat acttttgtat ggtaaataag tatgaatacc aatctaagcc
                                                                            240
tcttaacaat gtgtacaagg ttagtgctca aaccacttca ctagagtaaa tattaatttt
                                                                            300
acgtgtgata ggcaaatgta tgtggagggt tagggaacaa cttattacca tttatactaa
                                                                            360
                                                                            420
tqqttcacct tctataaaaa cagtgaagct tgttacatac gcacacttgt ttgctgcaat
                                                                            444
gtttgggcaa atgatttaaa gggg
       820
595
DNA
Homo sapiens
<210><211><212><213>
       misc feature
n=a,t,g or c
<400> 820
gacaaaaata atcttgtttt tattttagat tcagatttca ttactgcact caaacgacta
                                                                             60
caactgggct tggcgttatt atacaatcca aactgtttcc atcagaaacg ctaagactca
                                                                            120
gtgtgcaatg attgttatta ataattagct ccttggtttc ttgatagaaa aaggctatca
                                                                            180
acaagcattt gtttatccac aacaaaaagt ataattagct tatcccactt agtaaatctt
                                                                            240
gtatgcatgc caactcatac caaactgcta cttttacaaa aaaaaattgc aataatacag
                                                                            300
ttcatttttc cagtcctttt tgcacaaaat ttatttacaa tgtctacata aatgctccaa
                                                                            360
qqtqqqacta tqaaaaaata cacacatgac cgatgctttg ctcagaaata aagtcaacat
                                                                            420
attanaaata aatcttcagt ctatgtttta gagctgctta aaacaggaag tgatgtataa
                                                                            480
ggtgggtggt tgtggcatgg gggacaatgg atgcctggat gtgacaatta gggcttctaa
                                                                            540
                                                                            595
acacacqqnc tttqqqtttc catgcctcct nctaccagtc tccttaagac cctgc
        821
341
DNA
Homo sapiens
       misc feature
n=a,t,g or c
```

becaute a character atanantage gasanatage tatetetage atagegaet	60
taggttttca atacacttta ataaaatagt gaaaaatagg tatctctagg atagtgaact	120
atgggactac aaagggcagg acgatacatt ttacttggtg aaattcgctt aacgcttact	180
cctttctcaa agcgccaacc aagaatttgg ctactaaata aagaaaaaag ctgttagtgg	
ctctttatcc ngccacgata nggtgctctg aaacccggtc ctgnaagaca ttcccttggc	240
ccacatttta tagnttcctt ctcagtctca aggnctgtag tctactgttc acactcgagn	300
ctctcgcaaa atacacaagc tcaaaagctc atggcntttc t	341
<210> 822	
<211> 405	
<212> DNA <213> Homo sapiens	
<220>	
<220> <221> misc feature <223> n=a,t,g or c	
400 000	
<400> 822 ttttacattg acaggtttat tcttaaagct tgaacaaata catctttaca cacacacaag	60
ttggtaaaaa gtaagccctt actgctttgt taaaaataaa acccatacat aaagctttcc	120
ggtcaaattc ccgaaacatg aaaacatcac atttctacaa tacatctgct tttttgattc	180
atgtgtgttt tcaacacaac tcaacaactc attccgatct acccaaacaa agagaaaact	240
aacttccaga ccatgaagga aaaaaaaata catgcctctt ataactgtta aagacaagta	300
gctatagaat tctngaaaat tctcaataaa tagttactag tataaaaatg cttaactcca	360
tatageteae etttaateea agggeagtae eagttatege eataa	405
<210> 823 <211> 507	
<212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
(223) 23-4,0,5 01 0	
<400> 823 tttctattaa tctttattta tatgatggtt ctctggaaag cacttcattt taaaacctgt	60
ttctgagata agtagcataa ggcgcatttg aagaaatact attgttgtat cacagagaac	120
ttccatgcct tgaaatcatt tttttcagag tattattaat aagatggtct agctatgcag	180
agcaaaaaag aaaaaaaatc ttcaaaagcc aagactgtca ggcacatgaa ggtatgcata	240
aactgtcttc acatttaatt ttgtatgatt cgggagatac ctccatgtac atctaaccag	300
gtcaggcagc ataagtcctc agtaaccctg gggtgtgccg gcttcaagcc aaagtattct	360
gttgagtttg gtttgtggag agacatttga aatgttgctt catagcttcc attttctgga	420
gaagtggaag aaatgaagcg tnaaaaggcc taggaaatcc tcgtcttctc caggctcttc	480
tteteettet geagntteet ceteete	507
cocceptat goughouses to see a	
<210> 824 <211> 414	
<212> DNA <213> Homo sapiens	
<4.00> 8.24	
gtcccacaag gatttcccag tttaatatgg aaggcagaac acacatacat gaaaggccat	60
aggaacaaat accaagcaat acgtaacata aaaataaatg tacaatgaag cctcactgct	120
tcaaatgctg gtaatctaat ctctaagata aaaaatatgt tccctagttt tgctaacacc	180
attcatttac gtaagagaac aaaatatttc aaacacttta gaggtattat taatatatac	240
atatcaaaag caatatatta tttaaacaat ttcaggcata cctcatttta ttgcacttcg	300
ctttattgtg ttttgttgac attgtatgtt tttcagatag atggtttgtg gcaacctgtg	360
ttgagcaagt ctactgggca ccatgttttc ccaacagcat gtgttcactt catg	414
<210> 825	
<211> 440	
$\langle \overline{2}\overline{1}\overline{2} \rangle = \overline{D}\overline{N}\overline{A}$ $\langle 213 \rangle = \text{Homo sapiens}$	

```
<400> 825 atatgcccca aacatgatac ttatttattg ataattcata ccctgcctat ttctcaaaaa
                                                                            60
tgacttgaga aaaactgcac aacatagcga caatacacat acagaaatta aaagtgaaac
                                                                           120
aggaatacat agagatataa cacacaaaca tcaaactatg attagatcag gtaaatgagt
                                                                           180
gttctgaact gctttggtgt cacagaggca tttaaaaaata tagtaaatac tacagatcct
                                                                           240
                                                                           300
tqtcccaqca aaattccttc aagcacatac ccagctttgt tcgatcccta ggggtctgca
                                                                           360
actectaaac cectacatge taaagactee taggeaggee atggaceece agattaagaa
                                                                           420
ctctaaagta aatgaaagtc agagaaaata tgggatttga ataaaataat ggaaaaaatt
                                                                           440
qaqttaacaa atagaactgg
<210><211><211><212><213>
       826
451
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<\!400\!> 826 attattaaaa actcatatag gatgctttat ttatagatac acagttaact atgtacaaaa
                                                                            60
taaaaaaaag gaaaaccaat ctactaaaat atattaactc taagaaaatc agatcttatt
                                                                           120
cctgtttctc catactaggc ataattattt tcaaagctat acaatacgaa gtttatcagt
                                                                           180
                                                                           240
cttatctqtt tqccataaca tcattatgaa ttttctcttt taaaaatggc aataacaagt
gacttatgtt ctaataaaat ttggatcaca gctagcaaat gaaagactat gagactcaat
                                                                           300
cacttttaat cattaagttt gtgttagtct ttattaaaaa caaaaaataa ctaaaatttc
                                                                           360
agacagcgat gtacataata tatatnagaa tatacccaaa aaagtaaatt tctaccaccc
                                                                           420
                                                                           451
ctcgcacage eggaatttee atgggggtat t
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 827
gagactgcat agggctcggc gtggtctgga aggaggtagg aaaagaatga aatccattcc
                                                                            60
caqqqacttt ctcaqqtqct gatttaaqat aaaatqcaaa tgaqqtagac acaqttccta
                                                                           120
gcctcaggaa ggacaaagag aaggggcagg tttggataat ctatatgtca gatgacaatt
                                                                           180
tattcaacga atatttttta aagtaccaac tgctagcaga accctgcact gctcacagca
                                                                           240
ggtggagcag gtggcagatt tcagagtcac ttgctgtgct gtgacttgga gccaagcccc
                                                                           300
                                                                           360
cgatttccca ctggacagag ataatgaaca cctagtttct tcatccatgt ggactcagca
                                                                           420
cacagtggta tttggatcac naaattatcc tggtactata ggcgaggtac aaaccctgtt
                                                                           437
aaggttgaga aggggca
       828
463
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 828 cgttgtaatt atttattctg ttactggctg cttagtgtga catatttgat gttatttcaa
                                                                            60
ttqtaatact cttcaaattg gaacactcct tttctgatat tcttagcaaa tccctctttt
                                                                           120
atttttgcca cttqttataa tatctctaaq aagttactcc aggaccgggc agtagggatt
                                                                           180
actgattcag atgggtccag tgactagaat atgagtagaa agtgtgaggt ctaatttgaa
                                                                           240
cctqtcaqaq ttactqttqc ctqcqctqqc ccaaaqtqca gatttttagt cagcttgtga
                                                                           300
```

taggccaggt gttttgtctg gaccaggagt tatctttgac ttgtagctag aataaggatc	360
ctgagaagtc aggtatccac ttgatgtcct tttatttgac ttgttaccat tagtactctc	420
ctgggatcaa ggctgccaac cgaacctata ncccagattt ccc	463
<210> 829 <211> 355	
<212> DNA <213> Homo sapiens	
<400> 829	
ccatttcaat tigtatcigc tatcctattt tittittitt gtattitigt attititact	60
ttcctttatt tgcaataaat ggttgtggat tacttctgga aagcagtaaa tcctaaaatt	120
gacccatagc catttattcc taagaacata aaaaatgcaa agatctaaaa aattaggaga	180
caattcaaaa ccaatgatat aatttaaata tgttttgtga agaacagggg tgcatgatct	240
tgtttttcat atcctctcat ttgtaggcag aatgtgtaaa tcatgtacaa gtgaaatgta	300
tcttctttgg tatgataaaa ggcaaagtgt cagcttggtt gataaagcag ataga	355
<210> 830 <211> 466	
<212> DNA	
<del>-</del>	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 830	
tctccattca attcatattt aatagaccac catctcttct gccttcatca ggaaaaaaaac	60
aaaaacataa acaaaatagt atctgcctat gattaatagt atttaattac acgcactttt	120
gtttgagttt acttccttgc tttctgaaaa aaacataggt atttagacac tagttcatga	180
tgataaaatt aaaatttagt tttacaaaca aaaattgaaa ctgtcatttg taggaaaaaa	240
attcaaattt aaaattgtta tttttcacta ttcttagata gcaagagaag taagaatttc	300
tttactngng atttatatca caacagaatt ttttccttga caaaggacct tttaaaaatc	360
ccaggaaagg accacaaaat aatcaaagac tgcacattgt aaataaaacc cttcagctgt	420
tattgaaaca taagtataat tacacacaag gaaaaggtat tataag	466
<210> 831 <211> 416	
<212> DNA <213> Homo sapiens	
<400> 831	
aatgtacatc atattttta tagaagtgat tatatcacaa agaaaaatcc tgccaaacaa	60
ctacaaatca agaatctgtg ggcaaaaagc tcaattcata caatgtaaac acattgaaaa	120
aacaaatgca aaataaaaaa agctgttgat acatcacctt gaaaaattaa cacaactaaa	180
ttaagggcta tagaaaatgt gttcagctta tatatcatac acgtcattta acttgaattt	240
tacaattttt aaactaatag aattcagatt tattacttga aataatggta tacccagctg	300
ttcttcataa tggcaagcat attccatata caatacaatt tatttagcat agttttatac	360
tcttaagtaa aatatgttag tggattaaaa gcataaagga ataaatatgg cccagc	416
.010. 020	
<210> 832 <211> 473	
<210> 832 <211> 473 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 832 cgctctttac tttttattca ctcacaccca ggttctttcc acaaagggtt caaggtagtt	60
acaagaatta ctactgtttg gcgtttgctg aaagaagtac gtgagaatat tatatgcttt	120
agaaaccaca gagtcgaagc ctgtcatcgt cctcatagac caatgagtag ccacacgtac	180
ttgtttggca ttaccaagtg tccgggcaag gccgcagcct gcagctcacc agccgtgctg	240
ctcggcctgt gcacgtcacc ggctcttccc tagggtagct tttgcttgct ttctcccacg	300
cloggeolge geacgleace ggerelece lagggrager crigeriger cretededacg	300

tccatcctct	ctctctctgg	actcacagcc	agccaggttt	ctagccttgt	cattcctaaa	360
actactgcct	caagccaggc	ggggcgcaca	caaacttaaa	atgctaatct	ccacagcggt	420
gtctggacta	atgggtgtcc	cccaccgtgg	gaatgtatgt	gagctaaaga	can	473
<210> 833 <211> 238 <212> DNA <213> Hom	o sapiens					
<400> 833 caaagaacaa	agaagtttat	ttctttccta	tgcaacaact	ccaaggtcaa	catttcaggc	60
catgggtagc	tgtgatccag	gaggtcattt	gggaagccag	gctgatagca	gttctaccat	120
cttccagatg	agatctccaa	ggtcactcta	gtcttcacag	ttccgcaagg	tccgcggctt	180
cattcttgaa	gtcagtgaga	ccaagaaccc	accaattccg	gacacacacc	tggattca	238
<210> 834 <211> 159 <212> DNA <213> Hom	o sapiens					
<400> 834 gcaataccac	aaatttatta	taatacacag	ggaaaaacaa	actcaaactt	tgacaacatc	60
_	tccagtcttt					120
	ttatacttaa					159
<210> 835 <211> 183 <212> DNA <213> Hom	o sapiens					
<400> 835	aacagttaag	qtttaatagc	ttttctacat	tacaaaaata	aaatacaagg	60
_	tggttttaga					120
	accaaaagga					180
tct	20	•	33 33			183
<210> 836 <211> 432 <212> DNA <213> Hom	o sapiens					
<212> DNA <213> Hom <220> <221> mis						
<212> DNA <213> Hom <220> <221> mis <223> n=a	o sapiens c feature	taaattaatg	aataagattt	cctctattaa	agttttttct	60
<212> DNA <213> Hom <220> mis <222> n=a <400> 836 tttttttttta	o sapiens c feature ,t,g or c					60 120
<212> DNA <213> Hom <220> <221> mis <223> n=a <400> 836 ttttttttta tggttttaa	o sapiens c feature ,t,g or c ctcagaaaaa	tgcacatata	caaccttttc	attagtaaaa	ttgcttagtt	
<212> DNA <213> Hom <220> <221> mis <223> n=a <400> 836 ttttttttta tggtttttaa catgcaatca	o sapiens c feature ,t,g or c ctcagaaaaa aaaagtgact	tgcacatata ataagtattt	caaccttttc catggcattc	attagtaaaa tccaagctct	ttgcttagtt actacttgaa	120
<212> DNA <213> Hom <220> <220> mis <2223> n=a <400> 836 tttttttttta tggtttttaa catgcaatca caggtctgac	o sapiens c feature ,t,g or c ctcagaaaaa aaaagtgact aattaattat	tgcacatata ataagtattt ctatgctaat	caaccttttc catggcattc gtactctgat	attagtaaaa tccaagctct cccaaatgat	ttgcttagtt actacttgaa tgtctaccta	120 180
<2112> DNA <2113> Hom <2213> mis <2221> mis <2223> n=a <4100> 836 tttttttttta tggtttttaa catgcaatca catgctaatca caggtctgac aaaatagaac	o sapiens c feature ,t,g or c ctcagaaaaa aaaagtgact aattaattat tgaggcatta	tgcacatata ataagtattt ctatgctaat ttttctggaa	caaccttttc catggcattc gtactctgat taaaccaata	attagtaaaa tccaagctct cccaaatgat attcgtatgg	ttgcttagtt actacttgaa tgtctaccta ttttaggtac	120 180 240
<212> DNA <213> Hom <221> mis <222> n=a <400> 836 ttttttttta tggttttaa catgcaatca caggtctgac aaaatagaac tggtattaac	o sapiens c feature ,t,g or c ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat	120 180 240 300
<212> DNA <213> Hom <221> mis <222> n=a <400> 836 ttttttttta tggttttaa catgcaatca caggtctgac aaaatagaac tggtattaac	c feature ,t,g or c ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta tgatgaccca gcaaatttgt	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat	120 180 240 300 360
<2112> DNA <2113> Hom <2213> mis <2221> mis <2223> n=a <4100> 836 tttttttta tggttttaa catgcaatca caggtctgac aaaatagaac tggtattaac tactgttagg nggtgcttnc <210> 837 <211> 459 <211> Hom <2113> Hom	c feature ,t,g or c  ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta tgatgaccca gcaaatttgt	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat	120 180 240 300 360 420
<2112> DNA <2213> Hom <2213> mis <2221> mis <2223> n=a <4400> 836 ttttttttta tggtttttaa catgcaatca caggtctgac aaaatagaac tggtattaac tactgttagg nggtgcttnc <210> 837 <2211> 459 <2212> DNA <2213> Hom <220> mis	o sapiens c feature ,t,g or c ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta tgatgaccca gcaaatttgt	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat	120 180 240 300 360 420
<pre>&lt;212&gt; DNA &lt;213&gt; Hom &lt;2213&gt; mis &lt;222&gt; mis &lt;2223&gt; n=a &lt;400&gt; 836 ttttttttta tggtttttaa catgcaatca caggtctgac aaaatagaac tggtattaac tactgttagg nggtgcttnc &lt;210&gt; 837 &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; Hom &lt;221&gt; DNA &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; DNA &lt;211&gt; CON &lt;221&gt; DNA &lt;211&gt; CON &lt;221&gt; DNA &lt;211&gt; CON &lt;221&gt; CON &lt;221  CON &lt;</pre>	c feature ,t,g or c  ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta tgatgaccca gcaaatttgt gg  c sapiens c feature ,t,g or c	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat aatacaatct	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa aaaagtttct	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc taaantggtt	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat aaaaaggttt	120 180 240 300 360 420
<2112> DNA <2213> Hom <2213> mis <2221> mis <2223> n=a <400> 836 ttttttttta tggttttaa catgcaatca caggtctgac aaaatagaac tggtattaac tactgttagg nggtgcttnc <210> 837 <211> 459 <212> DNA <2113> Hom <220> mis <2223> n=a <400> 837 tttttttttttttttttttttttttttttttttttt	c feature ,t,g or c  ctcagaaaaa aaaagtgact aattaattat tgaggcatta aaatactgta tgatgaccca gcaaatttgt gg  o sapiens c feature ,t,g or c	tgcacatata ataagtattt ctatgctaat ttttctggaa agtcattaat aatacaatct	caaccttttc catggcattc gtactctgat taaaccaata aaaatgttaa aaaagtttct	attagtaaaa tccaagctct cccaaatgat attcgtatgg aattatattc taaantggtt	ttgcttagtt actacttgaa tgtctaccta ttttaggtac aacatctaat aaaaaggttt  ttatctgaaa	120 180 240 300 360 420 432

```
240
tqaaaqaaaa catcqaqtta aggnaaaatc aatttccagt gattaagnta ttaacaatat
naaataatta aaaattactt ctnaaatgtc ttacattttg gacaactttg gaattatact
                                                                           300
tacatactna atatttccca aaaatgcatt taggttacag ggggtcactg gtcgggggtg
                                                                           360
gaaaatatta tttttggaaa ggcctttttt aagggtntgg ttntttattn tggcttttaa
                                                                           420
                                                                           459
cctcctttnc tttnttcctg ggggccaccg gggcttcgg
       838
289
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 838
ttaacaggag acaggggttt tattattact caaatcagcc tccctgaaaa tttggaggct
                                                                            60
                                                                           120
agggtttttt aaaggtagtt tggcgggcag gggttggagg tagagcaatg tcatttagct
                                                                           180
tgctcacttc catctgccag tttggnagct tcttggctga nagatggcgc cgggcatgct
tggtcaaatg gtcactcctc atgaaccgcc ggtcacacat ggggcacgca aatttcttct
                                                                           240
                                                                           289
caccegtgtg ggttcgcctg tgtctggaca gttcancaga acgggcaaa
       839
399
       ĎŇĀ
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 839
acacgttcag gggcctttat tactgcgggg ggtgggggg ggcgggggtg gttaggggag
                                                                            60
gagggagact aagttactaa cagtccagga ggggaaaacg ttctggttct gcggatcggc
                                                                           120
ctctgaccca ggatgggctc ctagcaaccg attgcttagt gcattaaaaa gtggagacta
                                                                           180
tettecaega atettgettg eagaggttaa gntetgtett tggetgttag aaaagtteet
                                                                           240
                                                                           300
qaaqqcaaaa ttctcataca cttcctaaaa tatttntgcg aagagtaaaa cgttcagcaa
                                                                           360
acacattnat ttggaagttc cagtagttaa tgcctgggca ntttttttgc aaggtgaggt
                                                                           399
tttqtctaaa ggccccanca gggcacaatt atctcccng
       840
423
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 840 tgaatattca agaaaggtga agtttaattt gcatataggc ataacctaca cctcacttgg
                                                                            60
caagtgttag gccacagcac aaacccctct gtccaatcac aaatgtccac aaatttgcaa
                                                                           120
agtaactgga cacgaacgat atgcttctca aactcacaca catattcgtc catcacacac
                                                                           180
                                                                           240
acactcaaat gataaagaan tacattgaaa teetetacaa aagagatetg aggacagtan
tcagatgacc tcatgtgcgg acagectntt gcagtttaca gtctaatcca tttggtcctc
                                                                           300
acantaqcec tgtgaggata agcagcacag ggattactnt tcacaccgtt ttgcaggatg
                                                                           360
agggaaactg aggctcaggg gatgtgtaaa caccagccta aggttttcca gttgggagac
                                                                           420
                                                                           423
tgg
       841
440
DNA
Homo sapiens
       misc feature
```

## $\langle 223 \rangle$ n=a,t,g or c <400> 841 ttttacnnnn ctttggattt tttattaagt tctgcaataa ataataggtt tataagttca 60 ccctgttgtt ganctcatca gtggtcgcca agtaagaggg tgaatcactc atcccaagag 120 actctgctac ctcttagctc tggagggtaa aaagcaaggg ccagagcaaa tacattgggg 180 agagggggag aaaaaaaaa tcaggctatt ttaatagccc tcacatgcca agtgcttttg 240 attcatcatg tttagttttc ataagcttgt gaggtagata atattatccc cattttatag 300 360 atqaqqqaat ttaggctcca atggggntaa ataacttgta caagnacaca tactggaatg 420 actgccatga gggagggaat gtgaattttg ggtcacgggg ccaacaccct acactcttcc 440 taccentgee acactgggea <210><211><211><212><213> 842 211 DNA Homo sapiens misc feature n=a,t,g or c <400> 842 tttgtcaaga gccaagacac aggtaatgca cgacattgat tgctgcattt taccttcaaa 60 atatttgtcc ttattgactg ggtctcctta attaatgtac acatgtcatt agaatgcaga 120 180 cqqaqqqqac tcaccatgaa tatctggggt tgattcccag atgtgtgttg cttctctatt 211 gcaagcagat teeettgtee ggatttaett e 843 510 DNA Homo sapiens misc feature n=a,t,g or c <400> 843 tttttttgtg tggtaccttt tatttagtca gtcttcattt aaatgtgtgc ttttgaaatc 60 actaaatatg accttttcag aattcaattc tcacagtatt tacagtgaac tttgtgcaaa 120 180 caaatccccc tttqtqcaaa gggggagctt cctgctcccn ttggcacatt aataacttac 240 aaattcaqat cacaacaaaa ccccagactc tagttttctg tttgaaaggt actgagctgg 300 qataatgggt tgctaggaaa gagctaatgc aagcccaaag gaaataaaat gttttcttta 360 tcagaaaaga ataataacaa ggcctcactc tccaaaggaa aacagacgtc ccaagatgtt gtggaacagt aattaagtaa ccaaatacaa ttccaatggn ttatttcacc ttcatttntt 420 480 atacttacnc tcatctcttt taattaaata agcgaaacca ggaaagtgca nttcgaaggg 510 actctgaact gtcaggggaa cgttntaaaa 844 402 DNA Homo sapiens misc feature n=a,t,g or c <400> 844 tttttttc ctgcatgatt gtttattcac atccacttag caggctggtg agcagcgtgc 60 gnaggaggcg gcagaaccag aacctggacg cagganaagg acggggggca cgagatgggc 120 180 acaggacgcc tcccaatcaa ggctgctctg tgggtttcag aaacgggaca cccatccctt 240 caqqcatcca tagcgtgtga actgtaggac tacagggtgc aggtcacccc agagctcagc 300 atccaaacca gtggggcaca gcttcggcct cccacctgcc caggctcacc agagacactg 360

402

qctntqqqca qagatgacct ggagccagga tccaggaact gttgcgcacg ggggtaagag

gccgggccca ncggcattgc catcgttggt tgangctttt gc

```
Homo sapiens
       misc feature
n=a,t,g or c
<400> 845
gggcggagtc agatcggctt taatagaggg agcctgagga ggctcgngcg tgcgggcncg
                                                                             60
                                                                            120
qccaqccccc tcctacttgg ctgcggctgg cggtggggcc tgggcgacgc tggtgcggcc
tggatggaca ggactccctc gggggacagc gcggacgtca cggcagccgg atccacgcca
                                                                            180
ggcggcaggc ggtacgacgg tggaactcgc gcgcgacgaa tccgtgctca tccgggcgct
                                                                            240
                                                                            300
cctcgtggcg cgcgtgcacc tccacgtgtt cgcccaccac cttgacagca atttcctccg
gcgagaagtg cttcacgtct aagcagcacc gaaaagtngc cggggtccgt cggnacctgg
                                                                            360
ggcgacgggc aagcgcacgc tgggttgcnc gcaggt
                                                                           396
       846
525
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
qqtttaqcaa aattqttata atttetttta aataaceeac agacacecat egacacttee
                                                                             60
aaatttacaq aqcaaaaaaq tqatttqcaq ctggttcctc cagggaattg gccccgaagc
                                                                            120
tgqctcaqtt cacctccaqq acctcaqtct ccgggaggcc gaacttggtc ttgtgcttgt
                                                                            180
cgaagagett caccagggee tecatgtaca tggtgtggta caggtegatg tettgetggg
                                                                            240
                                                                            300
ttgggtgctc cagcttgggg atggtgatgg gctctcccac aacagtgggt gatgggcttg
gagtagggca ccagccccca aggtgtcgga ggaagaagag gcctcgacca tggaagatgc
                                                                            360
                                                                            420
atggggcgaa accaatgtat ttctnggaac ttcttctggg acccatcggc cccaggagcc
ctcctcqaaq atcacctgct ttgtacactt tcattctctc ccaaaggggg tagatgggaa
                                                                            480
ccaggtcagc tcccatgacg cagggcccag ttttnaaaaa aagcc
                                                                            525
       847
418
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 847 tcatttgtct tcacctttat tgaaatacaa aatgttaagc attcaatctg tactagtaaa
                                                                             60
ggtgtttctt gaagttgata aaggaggget gggctgcttg tggtttcctc caatatcaca
                                                                            120
ctttcattta tttcatacac caccaacaac tctcaatgct taaccatttt cagttgccag
                                                                            180
gaaagaggta gaaatatett gteatggaca etegttetat ggtgggeatt tggaetgttg
                                                                            240
cctccggact ttcaaatgct tgctgaacct tccaaaatac ttcctctagg tggcagcgca
                                                                            300
ggaatatete tggaageatg cgatgagttg tgtgatgaag atgggaagee cettggtgee
                                                                            360
cqtctctccc tgggacacgt tatcctgggn tgtcaagatt ccccttctac aatccaca
                                                                            418
       848
455
DNA
Homo sapiens
<210><211><211><212><213>
       misc feature
n=a,t,g or c
<400>
       848
```

```
tttttttngg gctccagaca ccccagagtc tctttattga ggttcttaga aggcgagtgc
                                                                          60
aatctcagcc tagggtagct gaaggaggtc cagttcgtgt caagtctgtg ttcaggaagt
                                                                         120
                                                                         180
aggtgcagag ctgccctttg cctttcacct tgatgacacc ccggctgtag caggtgtagc
ccagggactg tagggcccat gctgtctcct cagtcacttg gattttgcca aggactcctg
                                                                         240
tactctccat gcggctggcc acgttcactg tgttgcccca aatgtcatat tgcggcttct
                                                                         300
                                                                         360
qqqccccaat aactccagct actacgggtc catggttcaa ccccacttcg caggcggaag
ttgttgaatg aatgcttgtt gatgacgtcc agcttagacc ccagggccac ggcaaattcc
                                                                         420
                                                                         455
accaatagtg ccaaaggtgg ctgcagctcc gttca
       849
586
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 849 gtttttttt aagattccac ttctcagttt atttctggga ctaaatttgg gtcagagctg
                                                                           60
                                                                          120
cagagaaggg atgggccctg agcttgagga tgaaagtgcc ccagggagat tgagacgcaa
cccccgccct ggacagtttt ggaaattgtt cccagggttc aactagagag acacggtcag
                                                                          180
cccaatgtgg gggaagcaga ccctgagtcc aggagacatg gggtcagggg ctggagagat
                                                                          240
                                                                          300
gaacattctc aacatctctg ggaaggaatg agggtctgaa aggagtgtca gggctgtccc
                                                                          360
tqcaqcaqqt qqqqatgccg gtgtgctgag tcctgggatg actcaggagt tggcctggat
ggtttcctgg atccacttgg tgaacttgca gaggttcgtg tagacacccg gtctgttggg
                                                                          420
ccgggcacaa gggtaatctc cccaggacac gagtccctgc agggagccat tgcagaccac
                                                                          480
                                                                          540
aggcccccca gaatcaccct ggcaagagtc tctactgctt tgtcaccggc gcagaacatg
                                                                          586
gtgtcactat ctgtctcngg taanatcctc gcacttttct gactta
       850
470
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 850 tagttatett taetttttea caeatttatg ttaeetgget tgeategtgg geetttgaag
                                                                           60
ttccatatcc cctgacagta agggagatct gctctgagtg ttgcctaaga catctacaaa
                                                                          120
caaacctggt gttttattcc agttgaaaaa atgataattc tgtgaagcat ctggtcttct
                                                                          180
ttttactagc agctctagtg tttgagccta tcgtttggaa ctgtggaaaa ttatttctct
                                                                          240
aagtagetet ttaaaatgga teeetgteta catagagaet taagetatgg etettteete
                                                                          300
                                                                          360
agtggcctta gctctaaata tgaagttctt tctggactga aactaagaga aaagtaaagg
tcagactggt aaccccntta agaatgttga ncggttcctt accaataccc naattaataa
                                                                          420
                                                                          470
acngaaacct ggaatgnaga atgcnggtat acagagggga ataaaagata
       851
431
DNA
Homo sapiens
<210><211><211><212><213>
<400> 851 atagtaagaa cccaatttta tttagaaacc agcaagcagc gtatgcagtt aagaacccaa
                                                                           60
                                                                          120
ttttattaca atttqtacat aaatgcccag gaaaagttgg aaggtgctac attaaggtgt
taagagtcgc catgggggtg gctgatgtga gaatttaagg tgttttctct ttaggataaa
                                                                          180
atatcctacc gcccccagga gtgaccacgt gaggctgcat aatggccgtc tctgtgtctg
                                                                          240
cagtgatgtc tgcagtgacg aacgcccggg gtggtgagct ctaatggcct tctctgtgtc
                                                                          300
tgcagtgatg tctgcagtga cgaacgcccg gggtggtgag ctctaatggc cgtctctgtg
                                                                          360
```

tctgcagtga tgtctgcagt gacgaacgcc cggggtggtg agctctcgac tttagagaga gaattgcatc c	420 431
<210> 852 <211> 363 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 852 tttgtcattt catttagttt attagacaaa aatatatgat ttagacaagt tcgctgacgc	60
gctatttaca atctgaaacc actctatata cagaaaaggg gggaaagaga cacaagcacg	120
tgggggcatt taccgaaccc gataatcgca gccactggag ccgccggaga ggctgggcca	180
cctggacgcg agctcgggac cgaagaagcc cctttctgca gaaagcgacg gatgcgagtc	240
cttgacgtcg ttgtcatatt tgtcctttac accagtntga aatatttgnt cttaaantcc	300
cctcgnggcc gaattctttg ggctccgagg ggcnaaaatt tnccccatag tggagttcgg	360
tat	363
<210> 853 <211> 418 <212> DNA <213> Homo sapiens	
<220>	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 853 tgcaagacag aagcaagtgt ctaattatag caatttgagt tgagggtttc ttttttaaag	60
gtcaacagaa gccaaccttg gtcacacagg tagtgaggga aggatatgtt gtgggcggcc	120
cacaggcaac nattgttttc ctgacagaaa aaaaaaaaaa agcgccatca gtaccgcctg	180
tagggggcat ggtggggac agacacggca gaacgctgga ctcttgcttc agatnggcgc	240
accacaagca cacggcactc tgcacaggtg ccagtccacc accagggcca gcctttgagc	300
acaccctggg tgcctcagac tccggcagaa ccacatttcc atcgcacacc cacccattag	360
gggccaccag tcgagaagca agctgggcac caggcagctg ctttgacatc cagagaaa	418
<210> 854 <211> 355	
<210> 854 <211> 355 <212> DNA <213> Homo sapiens	
<400> 854 cttattggtt aaaggcaatt tattttgaaa tgttgctttg gttgtttgct ttctggaaac	60
atattggaac acttgttttt cataagctgt cctgacagtg gcacaatccc atccatcttc	120
aggeettta ataaggteat tatgaaatet gaatttetat taataetetg gtgeatteat	180
ttcatctgca aaagcaactg gcacaaccac tccttgccgg tgcagctctc ggagaacatc	240
taatattgag tetagttetg tgeggaactt etceagetea egattetta actgtgeeag	300
tottttccat ttttcaactt ctttgttttg ctcagtttct actacttggt gtgtt	355
<210> 855 <211> 434	
<211> 434 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 855 gcttggctca aggtagaaaa gttaaaattc ccttttctta gataaactga ttatttaaaa	60
ctgaaaatta acgttttgac aactcaagag tgtctgacat cgctgggatc ctggagtgct	120
gagtgtggcc tcgatggtgg cttcactcct ccacatctgg gaggcacttc agtctcangn	180
aatcacccc tttttttaaa agagaatgga ggcagctact ggaggccaag cacctccagg	240

cactcaaggc cctggggaca gcgctactga ctccactgcc tcagggaggc acggtgctgc tctaccactt cctctgggct ttgtaccttt aattgtgtct actctgccta agtgcttaaa taaagcattc cattaagcaa aatacacatg gagcggatta cacactggac tgcagaactc agatgtatgg gatg  <210> 856 <211> 429 <212> DNA <213> Homo sapiens	300 360 420 434
<2213> Homo sapiens  <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 856 tttcttgtaa caaggcattt atttgggatg aggaaaggaa</pre>	60 120 180 240 300 360 420 429
<pre>&lt;210&gt; 857 &lt;211&gt; 233 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 857 taaacacagt tcatttttag tttgtcgtgg caatacatgg aaaaaaatca ggccactact aagcatctat agagtgtatc tttggcaaaa atgtggacct gcaacaattc agatggttt ctttcaatta ggttcaaaaa tcatggctct gtaaatttcc aaaactttta aagtcttctc atgtcttctt ataatcgggc attcagaggt acgtgttggt tctaatagct ttg</pre>	60 120 180 233
<210> 858 <211> 403 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 858 aatattaaac caatacttaa gttcctttac tcattgttga gacagactat tagtgtaggt gtactttcat ttatatgttg taccaataga ggttaaaagt atgaccctat cggtaatctt tttaagcaaa taaaactgtt tggatgcttt cccaggacga ttggattgcc ctccaggcgt atctcttcaa tgcggtcccg gatgtaactg gtgtcattag ccttgcagaa tggtcatct gtaattgaag ctatgttgtt gaactgaaga tgaattacac gtagactttc tggtaaatta agaggcacgg attccagggc attatgggtc caagtacgag gaaggtgagg ttattcagtt ttttgaatgc atttgctttg attcccctac tcttgatttt gtt</pre>	60 120 180 240 300 360 403
<pre>&lt;210&gt; 859 &lt;211&gt; 382 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<pre>&lt;400&gt; 859 aaaacaaacg catatgacat tttacttaac agactggcaa aaatgaaaaa agaaacataa tatcctgagc tggcaggagc acaaggaaat gggtctcgtg ctgatgatga atgtgaattg ataacagttt ttttgtgatt tgcgatacac naaaattgaa aacagcacaa atgtacgtta ctctgggctc gctaaatagg cactaaataa aacgagtcag tttcttctcc cgagcaagta aactagaggg tagatccacg cgacccggag tctaggacac atcctcggga gtgaacagcc acaattcaca gacgatgtgt gcagccgggg catngaaagg cccaaggcaa acacaccacg</pre>	60 120 180 240 300 360

aggtaaacgc cgggactctg ag	382
<210> 860 <211> 410 <212> DNA <213> Homo sapiens	
<400> 860 aaaaaaaaa caatatttag tctttctggg atatcagctt ctgcctaaat tgtgagaggt	60
ggtgtttcaa aagacacacg caccagtggc cccggggaga gctgcattcc aggttcctgt	120
cctacgtagg cccctacggg tagctgggga caccagtctc ctccactcac ttggcaggag	180
tcaggactgt ccacctcttc aactggcaca aggcccaagc agcatggggg ccctgagtga	240
aatggagggt cccacactgc ttccaggaca ggactgtcgg gggctctcct cacccctgac	300
tggcccacag cagcaggctg ctcctggcgt ttggcagcag tcgtgatggg gctgcagcag	360
ctggtgagtg gagtcgtcgg gcagtgtgta taagaaagag ccctcgtccg	410
<210> 861 <211> 315 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 861 ttttttttt gaccccaage acagetttat tgacacecca gecaacacca acaetettte	60
caaccagogg tgaggggccc atgggngttn gcctngaagg tggattgagg gcctcggttt	120
tttgttgagt gatgacagct ccatgttcct tccagttggc cctgcagccc ctctatcccc	180
cagetttage egetaeteee agtggggeag gaggagette catttgeeat etggagaece	240
tggcagggac ttgcccatcc gatccanaca ccagcagggg acctcgggcg ctgcccctgg	300
ggatganggg gcant	315
<210> 862 <211> 434	
<212> DNA <213> Homo sapiens <220>	
-	
<220> <221> misc feature	60
<220> <221> misc feature <223> n=a,t,g or c <400> 862	60 120
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa</pre>	
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacac</pre>	120
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca</pre>	120 180
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca</pre>	120 180 240
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacac atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca gtctagatca ccagcttctc cacgctaagt gtacttgtgg tttcatcctc ttcatttgac</pre>	120 180 240 300
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca gtctagatca ccagcttctc cacgctaagt gtacttgtgg tttcatcctc ttcatttgac ccaaaatatc ctgggaggtc cagcatcctc tgctcagcct cagtgaggcc aaacgacgta</pre>	120 180 240 300 360
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca gtctagatca ccagcttctc cacgctaagt gtacttgtgg tttcatcctc ttcatttgac ccaaaatatc ctgggaggtc cagcatcctc tgctcagcct cagtgaggcc aaacgacgta ttgtcataga aggcaaactc agggtgagtg gggaagcttg acacttgtct tttctacacn ggttggtctc tttg  &lt;210&gt; 863 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre>	120 180 240 300 360 420
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aatttcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca gtctagatca ccagcttctc cacgctaagt gtacttgtgg tttcatcctc ttcatttgac ccaaaatatc ctgggaggtc cagcatcctc tgctcagcct cagtgaggcc aaacgacgta ttgtcataga aggcaaactc agggtgagtg gggaagcttg acacttgtct tttctacacn ggttggtctc tttg </pre>	120 180 240 300 360 420
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; maisc feature &lt;223&gt; misc feature canal general candidate and the state of the state o</pre>	120 180 240 300 360 420 434
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; maisc feature &lt;223&gt; misc feature getecttytyt acattttatt atcattatta gtaataaacc aataaaact gaataacaaa ggaaaaagct caagataaat aatttettee ttytyaatte aaacacatge acacacacae atceteetet gtytytta etteeteete acattetyte etaegytaca aatayttaca caaaagteta caaaacgcga gtagcagace ecagetyty taageteagy etyatteea gtetagatea ecagettete eaegetaagt gtaettyty tteateete tteattyae ccaaaatate etyggagyte eageateete tyeteageet eagtyaggee aaacgaegta ttyteataga aggeaaacte aggytyagty gygaagetty acaettytet tttetacacn gyttygtete ttty  <pre> &lt;210&gt; 863 &lt;211&gt; 413 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; maa,t,g or c </pre> <pre> &lt;400&gt; 863 gancatttta ggaaacett tattycaaat gecattete atattyatt ttgacagaaa</pre></pre>	120 180 240 300 360 420 434
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  <a href="mailto:decorate-red"> &lt;400&gt; 862 gctcttgtgt acattttatt atcattatta gtaataaacc aataaaaact gaataacaaa ggaaaaagct caagataaat aattcttcc ttgtgaattc aaacacatgc acacacacc atcctcctct gtgtgtgtta cttcctcctc acattctgtc ctacggtaca aatagttaca caaaagtcta caaaacgcga gtagcagacc ccagctgtgt taagctcagg ctgattctca gtctagatca ccagcttctc cacgctaagt gtacttgtgg tttcatcctc ttcatttgac ccaaaatatc ctgggaggtc cagcatcctc tgctcagcct cagtgaggcc aaacgacgta ttgtcataga aggcaaactc agggtgagtg gggaagcttg acacttgtct tttctacacn ggttggtctc tttg  &lt;210&gt; 863 &lt;211&gt; Misc feature &lt;2210&gt; misc feature &lt;221&gt; misc feature &lt;221&gt; mac,t,g or c  &lt;400&gt; 863 gancatttta ggaaacctt tattgcaaat gccattctgc atattgatt ttgacagaaa gtatcagaaa tgcttcttc ctgggaaaag gaatataaat gacagcaaga cacattttag </a></pre>	120 180 240 300 360 420 434
<pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; maisc feature &lt;223&gt; misc feature getecttytyt acattttatt atcattatta gtaataaacc aataaaact gaataacaaa ggaaaaagct caagataaat aatttettee ttytyaatte aaacacatge acacacacae atceteetet gtytytta etteeteete acattetyte etaegytaca aatayttaca caaaagteta caaaacgcga gtagcagace ecagetyty taageteagy etyatteea gtetagatea ecagettete eaegetaagt gtaettyty tteateete tteattyae ccaaaatate etyggagyte eageateete tyeteageet eagtyaggee aaacgaegta ttyteataga aggeaaacte aggytyagty gygaagetty acaettytet tttetacacn gyttygtete ttty  <pre> &lt;210&gt; 863 &lt;211&gt; 413 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre> &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; maa,t,g or c </pre> <pre> &lt;400&gt; 863 gancatttta ggaaacett tattycaaat gecattete atattyatt ttgacagaaa</pre></pre>	120 180 240 300 360 420 434

tcctccccgg gaaacagcac tgtttggtct gnatcaaatg ccgaagctgg gaatctgatt ctggggtgcc gtctcttcgc tactgggagt tgctgaccag caggctgccc attcacgaaa agaggttggc aaggccaggc ccccaggtng cgctggggat ttctgggctg ggc	300 360 413
<210> 864 <211> 274 <212> DNA <213> Homo sapiens	
<400> 864 ttttttttt tttttttt tttgcactag aataagtaat ttattagtaa gcacaatgac	60
atcttttagg agaggtagga caggtcccca aataagcagt tctgtctttt cagtgttgga	120
gccatcagac tcattgggac taggtttaaa ctggacattt tgagaatgat gaaaatcctc	180
caggtctgcc aggaaaaaca tttcactact tcatagtaga tgatacctga caccacctgc	240
taaagagcta agatgacatt ccctaagtgc ctag	274
<210> 865 <211> 501 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 865 tttctctctc tttggtacag aatatagaat cctgacctcc caagaaagtt aatttactca	60
gtcagtaaat ctggagatct ctgcatgtag catttttatt ttacatattt atttattagg	120
ccccttctgg ttccaaacag gatttggcac actgtnnttg attttccgct tccttccaac	180
tctgcaggaa acaacaaaag ccccactaag acctcaaaag gagaaatcct cttgacccag	240
tttcacgaat ttttcgacac tgtcgtttat tgaaggccat cttgtggcaa ccccagtgtc	300
catgggggag gagcataccc agagaagagt gtaaaaacaa ctccatctgt tacaggacag	360
gggtcccaat ccagactcca agagagggtt cttggatctc gcgcaagaaa agaattcagg	420
acaaatctgc agtgcaaagt gaaagccagt ttctaagaaa gtaaaggant ggagaacagc	480
tctccatgac agggcggccc g	501
<210> 866 <211> 289 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 866 ntttttaagg agctttctgc atccacttta tttagccaga gagggaaggg gttgacataa	60
acgaaaaagt ggatcaaata gtcaagaaca tgatgggcgc ggcaatgaac tgaaccactt	120
ttgctaagtg acagaaaaat attctaatat taaggattat tttacaactc natggaagta	180
atgengtgat geatettgea tetgttttgt ettgatgaea aaacgeacte ttagagteac	240
aagatcctgc cttgtgttag ttataaacaa aaatatattt atatatata	289
<210> 867 <211> 512 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 867 tttaaaagta tcaaataatt ttattatgaa agataagcca tttattgacc attcactttt	60
ctaaaaaaac acaaatgtga gaataaaata aacataccta agactnactg gccctccag	120
gacaggaagc agccctggac angagagcct gcaaacggag ttnccttatg nnnaatgtct	180
gaacttctca tacattctag gatttcatgt ttcgttacaa aggaaaggaa	240

```
agattcatgt acaagaaggt cacaacttta aagctatctg acgctaatga cttgtacaat
                                                                       300
ctqqtttqca aactctqaga gacagtatca aataagcact gttcaaagac tactcccagc
                                                                       360
taateettta etqteatttt etetttqaaa ttqtetttqq qaetqqntat qtneteaetq
                                                                       420
tagetteeqt ttateceaca geeceaaane eetanagtee eatggtgeag tetecatgtt
                                                                       480
caaggtataa aagtctgttt tcaggacaan gg
                                                                       512
       868
       463
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400>
       868
aaagtataaa gtgttttgga aaaaaaggaa aaaaatctat ataaaaatct cttcacatat
                                                                        60
aaaatcctga agaaggtgca aggtgagacc cagtgcgagg ggcgtgctca gatatgcagt
                                                                       120
qtqtqtqtqt qtqtqtqt qtqtqtatcc qtqtqtacat gtqtqcacqt gtqtcqtatq
                                                                       180
240
acgtgtggcc cacagagggt ggggagaaag cttggctttt tacttccatc caggagggaa
                                                                       300
ggagggcggc tggtcctcca gccttggagg gtctgcagct gggcgggacc tctactcagc
                                                                       360
                                                                       420
caqqctqttq cgcatcgact ccttctcctq gagggcggcc atggcaagac gcaggtgctc
                                                                       463
cttcagctgc tcgatctccc gctcagaccg tgtctngatg tga
       869
437
DNA
Homo sapiens
<210>
<211>
       misc feature
n=a,t,g or c
<400> 869
ttttttttt tttttttt acaatctgga atatataatt ttnattagtt ctcagcagtg
                                                                        60
cagtaaatga acaacactta ttaataatta atttgggaga gaatagcagg aggaaaaata
                                                                       120
                                                                       180
taaacagtag ctttttgtga ccatttttaa gtagctgaca tctcagtatg tttctggaat
qaacaaatta aqqqtqtatt qtatataqtq atttaaataa tcaqctttct tataqtctta
                                                                       240
tcaactgaga ttataaaatt gtaaacacaa tttttccatg tttacatcta ctagctttca
                                                                       300
tttqqacaca ttaaaccata cttttccatt atqtaqttaa ttcatttctt qaqtqcctqc
                                                                       360
ctqccattaq atqccaqqtq cttatctaat tttccaqtta qttactqttc aqcttaaqtc
                                                                       420
actctacttg gttggtn
                                                                       437
       870
<210>
       434
DNA
Homo sapiens
<400> 870 atatagaaat aactttaatt aaaaaactta catagaagat tataatatca gacgtgacaa
                                                                        60
agatttgagt ttatttgcct ggacaacttg ggtttgtctg gcttttgttt tcttttctt
                                                                       120
taaaaataaa tgtacagtaa aactacaagc aaaagtttgt cagtattgaa ttgaattttt
                                                                       180
taccccttaa aaggactagt ataatttcca atctctaaca aaaacttagt gtcaaatctc
                                                                       240
acagataagg ccaaatggca gatattttca gttatgtggg tagtacaact tgagtaacct
                                                                       300
tttttacatg acaaaaagtg agttatataa attgtcctca actttcacat aggaaaaaaa
                                                                       360
tggtttaata gcttcaaaag gaattttctt tcatgtatac tcttcagtat ccaatattga
                                                                       420
agctttgttc tttg
                                                                       434
       871
350
DNA
Homo sapiens
```

```
<400> 871 cagtccagtt tgtttgaagt caatcttttc atcagaggca gcttaaagat gctttcagtt
                                                                           60
agttttgtct tactttcaga tttctctaca taaatctaga tactcattaa gtagccttat
                                                                         120
gacaaacagt atgagatact tatgacaaac tcgctctgtc acccaggctg gagtgcagta
                                                                         180
gcatgatcga cagagtgagt ttgtcaaaag tatctcatac ttataaacag tatgagatag
                                                                         240
gaggattaaa atattatttt aaagaaacca ctgtttcccc ctaaaatgtc ataagagcac
                                                                         300
tgaagaactt gaaatatttt tttcagagtt tctcacacac tttaaaagtc
                                                                         350
       872
442
DNA
Homo sapiens
^{<400>} 872 ttttttttt ttttttttt gcactgggct gattgtattt gcataaaccc
                                                                           60
aaqqaqqqqa aacqqcaqqq ccaqcqqtaq qctqaqctca ctqqcaqtaq aaatcccatt
                                                                         120
tgtctgtctt cacatcgact ttgccaggtt tcagggtctg gtcctctcgg acaatgctac
                                                                          180
tggggaaata gcccaggcga gcagccagat ctccatagta atctccctga acgctgcctc
                                                                          240
cccagaagag ccgccacgg ccgttcagct tggagaagac atacaccact tggccccggt
                                                                         300
gaatggtcag gaatcggcag tcgggggcca tgtagtcctg aagggccaca gcatgtgaga
                                                                         360
tagggtggct gcactcctgg tccgcacaca gcttccggtc agccagcttg ggcataggac
                                                                          420
                                                                          442
cacccctgac accaggtccg ga
       873
350
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 873
geegageeca eccegeette teeegeeegg gteegegeac egtteegetg eagaaagege
                                                                           60
aggecatece ggtatecetg ettgeacate tetegeagea ecaggggete eggegggaag
                                                                          120
agggeettgg agaggeggta gaggttgege aggttgaact ggatgetggt gttggtgace
                                                                          180
cgcagctcgt ggatgttggt ggagctgtcc tgcggacnag atgtcactct cgcccgagaa
                                                                          240
gggggacact gtgatggtgt tcttaagctc atagagtggc aggttgtctg aaatgccacc
                                                                          300
atccacgtag cgcttccacg ggacacacag acaggaccgt atgtgagggc
                                                                          350
       874
425
DNA
Homo sapiens
<\!400\!> 874 ataaagattt cctccaagcc acatgaggac tctggcaccc acccacaaag caagacctgt
                                                                           60
atttataagc cgagggtcag ggagctaact gcgggacccg tcagccccgt gtacccatcc
                                                                          120
                                                                         180
ccgtccccac cccccctcc accgctgggc ccatcagtgt gtgttggggg gatgcttgca
gctgggggtg aggagacaac aaacctcggg aactggagcc agagctgcgg cctgactgac
                                                                          240
gccttttgat gctcacggga aatttctgcc caggatctca gccccaggct ggttgtttct
                                                                         300
acaaatctct ctcaaatgta ttattttggt gacaaaaatg aaggagcttt gtaaattttt
                                                                         360
ttaaaattat gaatcatatc aagtagttgt ttacatttct tgaaaaaata ggaactcggg
                                                                         420
                                                                         425
cagca
       Homo sapiens
       misc feature
n=a,t,g or c
```

```
<400> 875
ctaaatgett taattttttg teacaaatat ttetgeatet eteagteeet tettgttgga
                                                                           60
aaaaggaggg ctagtgatac atttgttaat ggcactttta aaangtgctt tggtatatag
                                                                          120
aggnaacaat gtacttcnna ggnatgttaa taataaatta aggttataat ggttgccata
                                                                          180
tcngagngaa tgnataagat tagtctcagc aaaaacaaaa attagtttgg aagtagata
                                                                          239
       876
407
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 876
ttgtgcaaag gaatgcatgg gtagcactat cttatgacct gggctgtctg acggctggct
                                                                           60
ggcaaagtca agtatctcct ggcagaagtg cttgcgctcc tcttcagtga ggtggtggtc
                                                                          120
actggctaag aggctgctgg tctgcaggta gttttnaatt tgtccaaggt gcttttaaca
                                                                          180
ttcggccagc tgcttccttg tgtgtgtnat ggggagtgcc cagccctcag ccaggtagtt
                                                                          240
tttcagtgct ccttgaagat agatttctgc cttttgtgga gcctttttcc tcatgtaaaa
                                                                          300
ctctgccaga tcttttccaa caaacttagc agatcgaatc ctcccaatgc ttgtatacat
                                                                          360
ttcaatggtg gcatgggaca aatctaagta gtgtttttca aaagctt
                                                                          407
       877
384
DNA
       Homo sapiens
<400> 877
ttttttttt gtactcttta aatgtacttt taatgtattt taaagaaatt ttaaatgaga
                                                                           60
tatttaataa tacaagtatt tgagagcaat aaaaaaagaa agtccataca aggaagatga
                                                                          120
acttagagag agctaccaga gcaggtaaat ttccagcatt cttccatcat tgttgagaga
                                                                          180
tgggtatcaa agccagtggt gttctgttct ccttggcagg tagatcccca aggtggggta
                                                                          240
gctcaatgca attagctggt aagatcaccg gactcactct tccagggatg actccgtgca
                                                                          300
cattaggaaa cctgacattg gtttgccttc caatgtcgct ctttgctgtg ggggcaatgc
                                                                          360
cctgggcaca catattatca gaac
                                                                          384
       878
223
DNA
Homo sapiens
<400> 878 atggctcaat gttaattttt taatatactt gcaaatacat tataataaaa taatacaacc
                                                                           60
                                                                          120
aaatcaaaaa gcagccactt aaaaactgaa attcacaaaa tgagctgttc ttggctacat
acagaaqgcc aacatttaaa ctgaatgata attaaacgtt tactaccata ggtaatattt
                                                                          180
acgcacttct gggtccaata gaaggtgttg aatcaatgtg atc
                                                                          223
       879
541
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 879
tttagccgct caaagaaaat ttattggcac tcggtaaaga caatgccaca aaatgccatt
                                                                           60
qaaacaqata totqaaaqca caaqqtqotq atqtaqccac tagatqaatc tqttcqqtaq
                                                                          120
cagttgagcc cggtgaatta aggagtttac agctgttatt tatgtggctc atgatgctta
                                                                          180
ttqagcaatc tgcaaaaata gatttcctgt ctcacacagg acagggtaga tttccagcaa
                                                                          240
gcataatcaa aatctccaag tcttttggtc aaattagagc tgccaccatg cacgaggttt
                                                                          300
tacttaaagg tgtttactga tgaataaact cacacttctg tgaactggtt cttgcttctt
                                                                          360
```

```
gtgcagctaa ctctttccac ctctctttgt tctgctgaat gatgtccacc aggttgttct
                                                                         420
                                                                         480
tqaaactctt caggtccact gctgcaaggg agtagtctgg ggaataggna ccatcactca
                                                                         540
tggaggcctt tgtatttgat cgtctaagtg catcagccat gtggtacccc acaatgtggg
                                                                         541
       880
414
DNA
Homo sapiens
<400> 880
tggggtaaag tttaatggaa aagccgtgga aacgttgagt tcacaaacag gacttcccgt
                                                                          60
qcaactqtcc agccagacct ggggcagctc ctggggaccc tgcccccttc acacacaccc
                                                                         120
                                                                          180
atcccatcca tggtgcctga gaggccttca tcttcagttc cctccaccag atcagttggg
catgttgggg gcagagatgg agggttgttg aatcacacta ggctctgtaa gctgagaaga
                                                                          240
cgatcctgca cagggtggcg taacagtctc ctcctgccag ggcacctgca gggcgagaag
                                                                         300
                                                                         360
tcacatgcca gactgaggca tgcttgcgaa cactagcctg gccccagcag cagggggtgc
                                                                          414
tggaggaget geagetttte cecatettge tgaattattg atgggeetgg caet
       881
445
DNA
       Homo sapiens
<400> 881 tttcaatgca tgaatatttg attttatttc aaaagacaat tatttataac actgaccctc
                                                                           60
                                                                          120
tatcaaaaaq aatatgcttt tctgatgggg aagtgacaaa aaaaaaaaac tacacagaac
aaqaqtaata aagttotcaa gtaaggattg cactocaata ggaattgagt gattototca
                                                                          180
gagagcactc attacatctt agacaacgtc actcttcttt cctcttggcc atatgttcag
                                                                          240
                                                                          300
qtctcatagt ctttctgaac acagaatggc agtggccagc attgtccatt atctatgttc
cqcttqttta ctaattaaaa agctttggtc ttcagtgttg taaacgcaat ttctgccttc
                                                                          360
                                                                          420
qatatcaaaa ggtgagtgaa tgagacaaga ttagttgaag gaagtacttg atattttact
ccagatagct gaatgaaaat gggta
                                                                          445
       882
263
DNA
       Homo sapiens
<400> 882 aatttttaaa aqttqtcata atgcaaattt tattttgatt agtttttgtg actcctttat
                                                                           60
                                                                          120
cttaaaccca qcgatgcttg ccacttccca aggtgtaaaa atgtgaagat taaggtaaac
tgaatgtcga ggagtgtaaa gagatggcaa aacacagata aaaacatcca aaaagcctct
                                                                          180
                                                                          240
tgqqqcaqqt caagcttatg attcaacagt tagaaaacca aaattacttg gacatcccct
tctacttaaa gtgatatact gga
                                                                          263
       883
305
DNA
Homo sapiens
^{<400>} 883 tttttttt ttaagtcata ttcataaatt ttattcattt ttaggaaagg acatatctaa
                                                                           60
aattactaat cagagaattc accctatagt cctcatacaa aagctggatt ttgtcaagga
                                                                          120
gaaaaagact ctttcttgaa aaagattaca gaattctttg tcctaaaaat gtagcacctc
                                                                          180
                                                                          240
atacatagaa tgtatagcat aaaataatgt ggctttcaac acatgatcat tcataatttg
tgaagtgtet teectatgea tacatgaaaa gteeatattt tgagtattag ttaaataaaa
                                                                          300
                                                                          305
acttg
       884
361
DNA
       Homo sapiens
<400>
       884
```

					60
tttggggtag tatattaact					60
gaatgaatta atgaaaaacg					120
tagttttaag tcttaggatg					180
tcatttacat gtgtgcaaac	taaaatgcaa	ttttgaaaat	aacacacctt	tccgtacagt	240
ctttggtagg tgatgattca	ttttccctgc	tatgggtaat	ctcatctaga	tcaaatgtga	300
tccttctaag ctagacacct	cttccctaca	gtaagaaggc	ctccatattg	ttcaagctac	360
t					361
<210> 885 <211> 501 <212> DNA <213> Homo sapiens					
<400> 885 tcatcctcag tgcaaactcg	ctggcacaga	gatgttcaat	gatggcctca	gatttcaact	60
cgttgtcaca gggaggacac	accgttgtgc	cttggggctt	ggaggcttcg	gtggcattgg	120
gcggcgtcat ggcgatgcag					180
gccagtagaa gccgaagaac					240
ccagcgacac gggtagatgg					300
gacctgggtg ccggcgtggc					360
cttcacctcc gccatggtct					420
cacgttgtgg cacagccgca					480
gaagcgcccg ctctggtacg		340300403	***************************************	333-3	501
gaagegeeeg eeeeggeaeg	9				
<210> 886 <211> 242 <212> DNA <213> Homo sapiens					
<400> 886 tttttttaac ttttagcagt	gtttattttt	gttaaaagaa	accaattgaa	ttgaaggtca	60
agacaccttc tgattgcaca	gattaaacaa	gaaagtatta	cttatttcaa	ctttacaaag	120
catcttattg atttaaaaag					180
ataaggagac taaaatattc					240
ac					242
<210> 887 <211> 472 <212> DNA <213> Homo sapiens					
<400> 887 ttttttttt tgaaggactt	aaaataccca	gactttaatt	cctctaagat	tatagtcatt	60
aatcatqctt ttatatcata					120
atttctaaat ataatgttca					180
atggttcttc ttagtatctt					240
gtccacaaaa catattggtg					300
gagcccttcc agaacacagc					360
caccagagge tgcattccaa					420
tccttaaaca caaacttaaa					472
ccccaaaca caaacccaaa	aacaaccggc	ccaaacccac	caccycaccc	~5	
<210> 888 <211> 566 <212> DNA <213> Homo sapiens					
<400> 888 tttgtttaaa tgaaaaaaag	aaaactgaat	atctccatta	agaaggcaaa	aaaqtqccaq	60
gcacgttagc acacacctgt					120
gagcccagga gtttgagacc					180
aagaaagaaa gaaagaaggc					240
					300
atcctcacag actggagcca	cacacaaga	gataagtagt		acyceccay	300

<210> 893

ataaccagga tgcatctaag					360
aagggtagag ggaataatga	ccagatttca	accctaagat	agaacccaaa	tacttgggag	420
gcttgtggtt ctttcttctt	aatggttgat	aacacagtgt	ccctacagag	aggtcatctg	480
aaactcagag gcaaataact	catcaggggc	agcaacactg	gcaacctaac	ttagaagccc	540
cgtgtggccc ctttttatt	tggagt				566
010. 000					
<210> 889 <211> 320					
<212> DNA <213> Homo sapiens					
<400> 889					60
tttgttgatc aacaaaattt					60
actagggaag tttctgtaat					120
caaccttagt aataaaaaaa					180
taaaaagcca gaatatacgt					240
aattttttag tttttccctt	ggtcttttgc	aaaagaaaac	aaatcctcaa	atatacttag	300
agctacatca taaaaatgat					320
<210> 890					
<210> 890 <211> 318 <212> DNA					
<212> DNA <213> Homo sapiens					
<400> 890 ttttttctga aatcattctt	ttattttgca	cacacatage	toctatttac	tgaacactgg	60
aaattcatga atgcgttaca					120
acttctacag ataataagta					180
tccctatcat attgctgaac					240
agagaagetg cagateaaga					300
	accegggeeg	ctgcatctga	ccagaaaccc	ccccccca	318
gtgtgagaac gttggatt					310
<210> 891					
<pre>&lt;210&gt; 891 &lt;211&gt; 451 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 891 tgaatgatgt gcaacattta	atagtcacaa	agcatttgct	ttcagtacag	ataatgaaat	60
acagtagtgt gaggtttggt	tgttttttaa	caatgaattg	tgctgggcat	ttatgtatag	120
agggcttatt attttcttct	gtatttctca	tattcacagt	tgttaataag	ttttctgagg	180
tgtcccaaag atgcaaaagc	agaaattttt	gaacacgtat	tttgagaatt	tctgaaactc	240
acataggtac attccacagg	gaatatacag	aaattttgct	tgattgagta	tagagttggt	300
aaaaatttct accacaatta	ggtttacaca	ggaaaatgta	aaaaattact	attttaaaag	360
gtaacacagt attaatgaag	atgtataact	atagattgtt	tctagcttca	gaagaggtcc	420
tttcaatctg tattaaaatg	ttgtgttttc	t			451
<pre>&lt;210&gt; 892 &lt;211&gt; 405 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<212> DNA <213> Homo sapiens					
<400> 892	+ ~ ~ ~ <del>~ + + ~ +</del>	+	atagatatag	attatt@aa@	60
tittttaaa aaaagtgttt					60 120
attaaaaaat acaaagaaga					120
gataatcact tagttttttg					180
atttcaaacc cacagcaaag					240
tagagtcacc aagtgttgtc					300
catatgtttt atattttcc	=			cigiggtaat	360
taatatctaa aaacttcagt	argritgeta	agaacagaat	geece		405

<211> 182 <212> DNA <213> Homo sapiens	
<400> 893 ttttttttt ttttttttt cattgtatag tgactttatt tgtctcatag tttttgtatc	60
aaaatcaata ctccttctct ttttcctggt ttccattggc atggaataac tctttccaac	120
tctttacttt cagcctatgt gtgtctttat agtttaagtg tgtttcttgt aggcaacaga	180
tc	182
<210> 894 <211> 481 <212> DNA <213> Homo sapiens	
<400> 894 tttgcttttc tccttcctgt gcatttaatc aatgaaaaca gaggttcaga atgatatgct	60
aatagtggga ggaaccacag caatggaatc aaacaatcag ttcaaatctt ggctctgccc	120
tagtagctgt tctctgtaaa ttggagttaa taaatcccta tgagaagtgg ctggtatata	180
acgggtgctc aataaatgtt agtactcttc ctcatgagca tctcagagga taagaggtgg	240
acaactgcag cctagattga aaacctgagt tatggagaaa gagttaaaat gacttaatac	300
tgtttatata gggccataaa aacaccatct gctagctcta gctagttaag ttattacaaa	360
gctgacatgc actaatgctg cactgatagg aaaggaatgg ccaaggtttt gctgtttcta	420
tcattattcg acgagetgee atgtcgggae cagtcgccag tttaacccat cacataacct	480
g	481
<210> 895 <211> 335 <212> DNA <213> Homo sapiens	
<400> 895 tttaggagta cacaatataa atgctttatt gctagcacag aggtttcttt ttaagtaaat	60
taaaagaaat aaatcttcat tttcacattt tttgttgcag tccaaaggta actagttggt	120
tagtggctat gtccacttgg acacatgcta caggagggca gcattcacat ggaagcactc	180
agaaatacgg catctgtcag ggctcacggc actgggctgc tgaatgcact gtcgtttgta	240
aataacagca agtggagact ttaaaacatc atggatagat aagagttata aatagaaaac	300
tggtacggtt aagaagcaga agatcgttaa ataca	335
<210> 896 <211> 406 <212> DNA <213> Homo sapiens	
<400> 896 aatctgaagc ccctgatttt atttttccag catcactcta aggaagagtg tggattagtg	60
ccattattca gggctggtat taataaaagt tagcttttat ctgcagggct aggttaaggc	120
tggcattctt acttttacat taaaaaaact ggctacaggc tgcgcactgg aggtacttca	180
gtcatgtgcc ttctctaaag gattcttaga tccttaaaat atatagtatg ttttaagttt	240
gtatctaaat agcacttact gtaatgtatt atacctaaat gtttattaaa agttagaaga	300
aatgagtacc aacaggccgg aatggaagtg aggagagggg ctaagacatt gctgatctga	360
gggacagacc tctatgcaat agaagagggc tgggagaagg ggtgat	406
<210> 897 <211> 265 <212> DNA <213> Homo sapiens <400> 897	
tttgtagaga gaaaaattta ttgcaaggca gccaagcaag gacacaggag tctggcccaa	60
atctgtctct ccaagttgga ggctggggca gattttatat acagagggta gtgaggcatg	120
atatgattgg atcttgtaat gaggggattc aggaggcttg atctgactgg atcacgccag	180
ggctcaatct gattggatca aggatcatgc cacgtggtgt ccacttctta actcagtccc	240
tgttcctcag tctgagcact taggt	265

<210> 898 <211> 400 <212> DNA <213> Homo sapiens	
<400> 898 tttgtctttt aaaaaataat ttaatgaaca tatagtttaa gatatagttt catttctaca	60
aagatgcatt taaaattaca attttagagc caagacagtt ctattaaatc aattgtcaat	120
attaacataa ttgattgttt catccaataa tgttatattc caggtttttc ttttaaaaaa	180
gactactttt aagagcagtt ttaggttcac agcaaaactg acaggaaggt aggaagattt	240
tccatatatc ccctccccc acaagtgcat agcctccctc ttcatcaaca tccctcatca	300
gagtagtgca tttgttacaa ttgatgaaga tacattgaca catcataatc acccaaagtt	360
catagtttac attaaggttc actcttgatg ttgtacattc	400
<210> 899 <211> 425 <212> DNA <213> Homo sapiens	
<400> 899 tgaagagcac agatttattg aaacaaaagt acatcccaca gagtggcagc aagattgagc	60
aacctgctgg agaccaccgg ttacagaatt ttctggggtt taaataccct ctagaggttt	120
cccattggtt actcggttta cgccctatgt aaatgaagta gtgatccgtg accagtctgg	180
ctggtcgtgg gaggggacca gtcataggta cttttcattt ttcatctgcc aggcagaaaa	240
ggggcaggtt gcaaagggag tataacctct gattcttttg ttacttgggc gaggaaagtt	300
gagattttcc tttagattta gttataggaa gtcagtgtga attggcttta ggcagtgtga	360
actgcctctg gaacttattc tcctgcctca caagcattta tgaaatctgg ccctagacaa	420
gatgt	425
<210> 900 <211> 530 <212> DNA <213> Homo sapiens <400> 900	
tttttttttt ttataagcag tttttaatcc ataaatacaa caggcatttg gtattttggc	60
catcagaaaa caaaagttgt agtatcagta aaggtctgag atggttcact tttgtagatt	120
caattcagtg tatttaaggt taacaaaggc tgacattgaa atgtttaaag ataggcaaaa	180
attcacatta aaaaaaaccc tatatttcta tttagagtaa cagtaggcag tatgattcca	240
aaagttaaaa attatttcac aacctgtagc ttcagcttgg caaacagctt agattccaaa	300
actgattcat ctctattaaa atgtaagcac ttaaaaaaag agcatgtctg tgtatataga	360 420
catatatttt aaaggaatca gataatcttt gaagcagcct tagtgtttcc tttaaatttg	480
tctggaaatg accattgtat tagcttcaca gaaaggacta gccagcttct tcgtctaagg ctaacatggt gatcatttgt ctaaggctag aaaggtacca acaagatgta	530
	330
<210> 901 <211> 116 <212> DNA <213> Homo sapiens	
<400> 901 tgaggccaca catgtttatt aggccggtcc tgacacctgc ctgcggggaa ggaccaccga	60
gaccagatcc tgggtgccat ggggtgcagg gacagaccgg tgcatggcag cggctg	116
<210> 902 <211> 485 <212> DNA <213> Homo sapiens	
<400> 902 tttttttta ataatcaact aagatgtata tgtaagaaag cctcatcttt tgatttttaa	60
tatacaagat gctttcttta agagagcaag attcaaaatt gttttgtgtt tcaaaattta	120
aaaataaatt tatctcctaa attttctaaa gacatgtttc atatatttga ccatccctta	180
ttttggcaaa ggattttaag agtctaactc aaacatatgt aagctctggt gtacctggtt	240
0000990444 9940000449 4900044000 44499 44499 9441 1991	

atatatacca aaaaaaacat ttgatctata tacacataga catgaatata tttctgtgtg	300
tgtttgtgca tatataacct caaacactat tattaaatgc aatcctatat tcttaggtat	360
agaagttgat gatatacctt tctacttgcc atggcattaa caaagcaagg ctgagactca	420
gcaaccactt gtgttcattg cattgcaggc tagtagtaag tttggttgct ggtaggaaaa	480
gggtc	485
<210> 903 <211> 488	
<212> DNA <213> Homo sapiens	
<400> 903 acatggctat ttcatttatt tagtagtttt gaaatgttag caaatataag gtatttgtaa	60
agcatctttc attataaaga gattagtaat attcaccaat catgccaatg agattataca	120
ctctgccaaa gactactaga aaaatttgat cattattaaa ttcaatgtta tttgacagtg	180
tgaactctat gtaacagcac aaattctgga ctttgaatct ggctgctgtc ctcacctgaa	240
ccattaaaat gaccttgtta acaaggaagg aatcaatggg gatatatcac aaccagagat	300
tggctgtgtg tccaagggtg ctttgtcttg ttgccaggat cagactgtga aatcacagag	360
gcaagctgat gtcatcagag gtgactctgc ctatttcaag tcctataatc accccatggg	420
attcaacagc agtaggaaaa catcacattc tcttaatgga caccccatat ttgtagaaac	480
	488
agttatga	400
<210> 904 <211> 354	
<212> DNA	
<213> Homo sapiens <400> 904	
tititititig cctcttttgt taaacagcaa cagagctctg ccactttggc caaccaccct	60
cctttgtcct cttccttttc cctcctgcca agtgtcctat tctcaaaagg tctaaatcac	120
tgccttccag cttggtgggc aacctgctgg gggccccaag tgaggtgggg aggggctccc	180
tagetattte ceagtgacet etateaeate ategtettta teeteateat cattggaget	240
gaacccaacc teggeaacct catgagagte aaatggagge acetgggace gtaggaggee	300
accagctggg tagcctgcat gtggggacat gtagcctgga tagatagaca tgcc	354
<210> 905	
<210> 905 <211> 407 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 905 tttatgtaat tgcctgttta tttagtggca ccagttttcc aaactagaaa ttatttctac	60
ttttcatcta acatacaatc tgcaaccatt cgcaggctga atgcaatttt tcaatgaact	120
tgaaaacaaa cagtacattc ttaaagttag aactgaattc acatattttc tttggaccag	180
gaaataatac ataatacaaa atatacattt atggaatttc tttaaaagtg tggatcacat	240
aaactgcaaa gtgggtgagt tgctacggag aattttgtta cacattgtat ttaagaaaaa	300
tatttctgca attatattat tcttaacatt tatagagttt aaaaaatgaa tatataatgc	360
aacatgcttt taacatgtac atgtctctcc actcataaca tttatac	407
<210> 906 <211> 189	
<210> 906 <211> 189 <212> DNA <213> Homo sapiens	
<400> 906	
tttatattca taattttatt cgtttgttgg gaaatttaag gcatatagaa gttaaaacca	60
cagccaagcc tcaggagatg cacatgttca aagatttcag agtgcagaga gtcatttcat	120
tttttacgaa gcacgtgctc tgcttccgga cggcgctaag tcggctgtgt gcccgggcgc	180
ccgcagttg	189
<210> 907 <211> 513	
<212> DNA .	
<213> Homo sapiens	

<400> 907					
<400> 907 titttacat tttattagaa t	ctttttatt	tttttctgca	gaaaacattt	gagatgctca	60
tttgatataa acatctaatt c	ccaagagaga	ccagtgctca	aatatagttt	tttcagctac	120
catttgatac ggccataaat t	tggatggtc	catgttacaa	tccttccaca	attctccact	180
taaagacatc atttttctat g	gtttttaatg	actattgcca	tctaacaatt	ctacaattcg	240
cctctttgcc tgtaaaaagg c	ccaactctac	gtccacctgt	gtctcatatt	gctatctttt	300
atttatctct gcttaagatt g					360
tgcaattcca atacaccccc a					420
cttgtagaaa tatcctactg g					480
gctgatggat tgacgaggag a			2		513
333333-3	3				
<210> 908 <211> 441					
<212> DNĀ <213> Homo sapiens					
<400> 908					
tttacattt cttctgtctt t	tattgtattg	cttcaattgg	caaatcatgc	ttgtattcat	60
tcatggggta caatgtggaa t	tgaggaaatc	ccactactta	gcatctccac	tacctcagag	120
agaccaattc cacgtgaggt o	cccagaagtg	ttgatctaaa	caagttgacc	ccatagaagt	180
agcaagtaga tcgatggtga c	ccaggggtca	gagagtggca	gaattacgga	atgggagggg	240
ggttgtcagt taaaggacca a	aagtctcaag	gaggaggaag	aggttttgac	atgtagtgca	300
cagcagagtg accagagtca	atgagaatgt	gttgcatttt	gcaaaacacc	tgagagagtc	360
catgtcaaat gtctctctgc a	atttagattg	gagaggacga	aggccctgag	gtccaagaac	420
attgaaacct gacagtggat g	g				441
<210> 909 <211> 398					
<212> DNA <213> Homo sapiens					
<400> 909					
aattaagaaa tcagatttaa t					60
ttttatatca atggaagaag					120
ctgtctgaat ttttataaat a	aaaatgcatt	atttagctga	aattttaaaa	atatttttt	180
cactagacgt tagagcaatc t					240
tttaagattt aaaataaagc t	taagatttgc	tttacattgt	ggcaaatata	tacattttag	300
aaaacaaact ttgtatttag t	tcaacataat	ttttaaaata	actaggttgt	ggatacacat	360
aattttctgc agtaattgac g	gacagatgaa	actacatt			398
<210> 910					
<211> 389					
<212> DNA <213> Homo sapiens					
<220>					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 910					
<400> 910 aaaactgagg gaactcatgc t	tttaatagac	actgaaaatc	acaaaggrgg	aaggccaagt	60
gccttagcaa tctcaataaa a	aatatgavgt	tctttttaca	tggtaaattt	cataatataa	120
mangtttaat gtctggvaat g	ggtgtaattt	acaaaamaag	tccacgtagg	ccaaagatgg	180
ctaannctgc atataaggva o	cgtgaatscc	agtggaaagg	tgtctgagga	ggggcagggc	240
cacaggtgtc ctgacaggga a	acatctttga	aggatctggm	acaaacaagg	gcccagttca	300
caaaccacag gtacactcat t	tttagatagg	mcagcagaat	aggtgatgaa	attatacagt	360
ttycacttgt tgcctactta					389
	_				
<210> 911 <211> 231 <212> DNA					
<212> DNA <213> Homo sapiens					

```
misc feature
n=a,t,g or c
<400>911 taattttcca caaagagctc cagaaggcaa atagtttatc acttccccac tctgaaatag
                                                                            60
cacgcaagac agatgatgca ggggaatggg tgtccactct tncttgtnct cagagctcct
                                                                           120
gcagcaggcc tgantgaccc gcaagcgggg cccatgcagc gtgtcctctg caaagtgcag
                                                                           180
gtnttcagtc cacacagca accaccagca ctgctgatgt cacggttgtc t
                                                                           231
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 912 tttttttt ttntttttt caccagtnt tctctgttta ttcttctcaa ctacaccatg
                                                                            60
ntgctttgca gnttggtttn acaaacattt ccccacaatt aggatgcatg atgaccaagg
                                                                           120
gaggaaagaa aattttcaca gggtatttaa aaagtctcag ggaacaaaca gntcagtgnc
                                                                           180
aaatcagtaa ggctaacacc tgaaaatgac tctgcacagg tgaggaagtg gagcagaaga
                                                                           240
gggaggggct ggttcaggga acaggattta atatgtcagt gaagaccctg cctctctctg
                                                                           300
taacaagatg cctaaagaag antagtggtg cttccagccc agctccctct tnttttggga
                                                                           360
acaacaqtca tttctcaqaa acctcacttn caaaqqcaqc ccttncaaaa acatqaqaqn
                                                                           420
tttagtttgg agaaattttt taagctcact tttgctggag aggaatgant ttaaactngg
                                                                           480
gcacacagng agcancaaan agttttnaag agccacct
                                                                           518
       913
427
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{400}> 913 ttttttttt ttaaaaataa agcctcttta ttggntacct gtaagctcag gtacaaggtg
                                                                            60
ttcccacaag gcacacaggc tggcaaggcc tacctgggnc aaggggcagg cccagagcct
                                                                           120
ngnntttctt gggcacagac acagagagna aatggaataa attatagttc tgacactcag
                                                                           180
ggacaatgta gaaattatga tgcaaaatta aacattaggc aaacaaaggg tataaaaacc
                                                                           240
ctcaggagcc acccctcgcc aactggcctc agggcatggg caggtnggcc acgatgaagt
                                                                           300
gcagtgccca gaaagccctg agataatagt ctggggcatg gttcncgccc cgaggtaggc
                                                                           360
cctttgccct ctctgggctt cctgtttcct ccttccccct nctacatccc tgggcctaga
                                                                           420
                                                                           427
ataaagg
       914
442
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 914 ctttaattaa aggctaatgc ttagcacttc attagnaggt ggagagatta aaaactaact
                                                                            60
tccttgccga atagcctggg tttggaaaag catgtttttg aaatatgtgg gatctccact
                                                                           120
ctggggccct ctgcagtcct gtctgggtct tcacacctaa gtcaaagcaa gagctatttt
                                                                           180
tgcgttagaa tttccttagc caagactaca agaggccaaa tgccagggtt catctcagct
                                                                           240
teetgtgeat teacatggaa ggtegtettt gaatetgeae gteeageteg ceatacacat
                                                                           300
```

gtctcaggga gtcactgctc atgctgggct atcagcttcc gatgcccaga gacccagggg ccggcacact tcttcccact tgcacggtgg gagttggggc cnggattttc acgggaacat cttctttcat ttgggncttt gt	360 420 442
<210> 915 <211> 328 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 915 nagnttettg gaacaagtat ttatttaact ttttattatg gaatatttca aatacacata	60
aaagtagaaa gantagcata ataaaccccc atgaacccat catccagctt caacaactaa	120
catttttccc gatttaattt caactattca tcaccccccc atcttttgct tgagtatttt	180
aaagcaaatt cagacatcat atcatttcac ttatgtatat ctnagtaaat gtctctacca	240
gatgaggttt tgctttgtaa ttnaatcaca tgtcaaacct aacaaantta attctaatca	300
tttaatatgg attnaacatc taggtctt	328
<210> 916 <211> 295 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 916 acagctaggc atgggggaga cagaattgga ctgagcacca atcattgttc taccttcagt	60
gagetgtgca gecataggan neteccaget tetgetgtge acetgtettg agetggaaac	120
aggtggcggg aagcattctc aaaggcccct tctagcacta actttgtatg ttcagtaaat	180
atcagttccc tggaccagct ccttttattc tggtacagaa ttattcttag cctatggggt	240
gggggtgggg ggacagtagt gtctatnatt tgtgaatttt ggaaccagtg tcatt	295
<210> 917 <211> 592	
<210> 917 <211> 592 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 917 ctttcaagat gagctgtatt tattactgga acggaagttg tcatatccgt gatcattagc	60
tttgaacttt aagcacgact gcttttcctc caaggactgt ttttcttcaa atgactggca	120
ccagcagcat aagcatgact taaagcagtt tttgaatctt ttgctcacca aatacagagc	180
aattgggtta atgcaggaat tcagtgaagc catgttgata ccaatatagt ccaataccaa	240
cagaaagctc aaaagttcac atctattggg atcattctga ttataaagag tgagcttcag	300
aatcctgctg aggtgaaggg gaagccagca gagggcaaag accaggacca ggcaaaagac	360
cggnttttgg gccacttncc ggctctggct ttagggtggt ccatttaaag caatctgcat	420
gccacttttc cttctcaaca tttcacaggt cnttagtgta taaaaaatgc ngtgatggcc	480
atgnaaagcc ggaattgnac tggacagcca ccatcttttg ccggcctggn aactggctgn	540
aagetgtett etgaaengga tgageeagee agtteeeega taetteentt gt	592
<210> 918 <211> 446 <212> DNA <213> Homo sapiens	
<400> 918 gacaggttet ttetetgtea etcaggetgg agtgtagtgg cacagteaca geteactgea	60
gccttacett ctgggctcaa gtgatcettc cacetcagec teetgagtag ctgggactac	120

<210> 923

aggtatgtgt cactacaact gactaatttt taatttttt atagagacac aggatctcac	180
tatattaccc aggetggtet tgaacteetg ageteaageg geecacecac etcageetee	240
ctaagtgttg ggattacagg catgagccac ggtgcctggc tatcacgcaa ttcttaagtg	300
cttattccag tagcagaaga gattagaaag gctggctttt tccaacagtg ggagcttgaa	360
tctggaaagt cttaaagttg ttgtaatttc acactactaa gaagcacttt gctcatgcaa	420
ctgaaaaaa aattaagtgc ctaccg	446
<210> 919 <211> 447 <212> DNA <213> Homo sapiens	
<400> 919 gctttccaaa gacaacaatt ttcaccatta ctcaaaattc tgtaccaaat gcaactgatt	60
aaaactggat atteetgaag cetaceacet gtteactaat gteeacagge ageeceaate	120
cacctcagtc aaacgtcaca cccaaacatt cagcttttct cagaccaaat taaatgttta	180
cagaaaaaaa aaagacccaa acgctaaaga tatttttaaa atatttaaac aacacaataa	240
agtaaaaaca acctcagacc cctcagacta gacattccca ctgaaaattc tttgtggtcc	300
ctgaatttga ttttctatgc aaaggcattg atttccaaag aagtgtgata aaaatgtggt	360
ttgggcattc tcaaaaactc ccagaaagtt ccctcttctg gctggcgact ttcactgaaa	420
tggaaaatcc ttcatggaga acgaatt	447
<210> 920 <211> 267	
<211> 267 <212> DNA <213> Homo sapiens	
<400> 920 ttttttttttttttttaaa agtccatcaa agttttattt ctaagaaata aacttgcata	60
taacccaaac gtaacaactc tggtattaca tcaatacagc tataacatta atgcagcaat	120
tatataacac aaaagtgcta taatgacatg ggaaatgttc atgaactgtg aggtgaaaag	180
atacagaaaa tgactatgcc tactgatact acctttgaaa aaggatccat aaaaaataca	240
ttgaatataa gttggctaaa gaaaata	267
21.0 921	
<210> 921 <211> 416 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 921 caacttataa gtaatttatt atgatattat agacaaatgc aaaattactg atatataggg	60
aggttcattg cacagaaatt tggtgctaac ataaatatct atgagtgaga aatgcttaaa	120
acatttaatt atattttatc tacaaaacat tcatgtcgtc attcaacaaa tgacacagat	180
gtgtatgtac tactgaaaaa gaaaaaggcc attgaataag ggctgttaaa tgaaagaggt	240
aatttgcaga aaaatgtgtt acaatatggc cacacacgtg gatccttccc cataatggct	300
tgtgtgtttg tgtgcatcta tccactaaaa gaatgcatgt agttcactta atagaggaaa	360
actataggga cagaattgga agagaggagg gcatttaatt tatatattat ttaaat	416
<210> 922 <211> 228	
<pre>&lt;211&gt; 228 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 922 ccatttgcat ctgaaccttc actaggtcag ttggattggc taaaaactgg ccaataacac	60
cagccatcat ccctccaatg actgatttcc aaaggggata atgctcatct tcacttttgc	120
caaacacaac ctctcggaga tgttcatatc gtgaccattc gacctccaga atacactggg	180
taaaaaagat cattaaaaag gtaactttgg ctatatgtat cnatatgc	228

<211> 466 <212> DNA <213> Homo sapiens	
<400> 923 taaaagccaa aataataatt ttatataaca taaatacaga ctaaagcaag cgtaaatgtt	60
atgtgtttta aagtctatga aaacatacat atttttaaag cagtcaactc attgaaagat	120
actaatattt aaagtagaaa gttgtgttgt ctgctgaaca tgagactctg aggtatttgt	180
gagagagaaa ttgtcaggaa agcagtagaa catttcctgc ccatgggtgc agtcttgagt	240
atttgtaata gccatgacga atccaaaaac catcaccaca gcaccaatgg gaagcatgac	300
acaagacata atcttatcgg agtgtgtcct tggttcttca gacagtttca gataacaggc	360
tgatggaatg ataaaaatga ggggagttgc acagagcaca ccattgagtt ctagaactat	420
cccgaggcaa tcaatcagca atgacaccag cgtgggctac agtgat	466
<210> 924 <211> 431 <212> DNA <213> Homo sapiens	
<400> 924 cagcagccgg agcagatttg tatttagtgt ttctgagccg agcagacctc ctgtgaattt	60
cctgcttact ctgttacaca aacaaattaa agaacaaaaa gagaaagaag taaaaagtgc	120
ataaaggttg cagtacaatc atcttacaag gatcccagag tatgtacttt ataagagcat	180
ttaacaatta agattgccct tttgcttttc aagagaagta attacagcaa ctaggctaag	240
taaaaccgga agttcagcac ccggaatctc ggagctcgct ggacaggcgt ctccagagcc	300
tccaaaaggt gtgagctgct tgtaataggg caggaggcgg gagtaggagt cagtcttgac	360
caagacaaac actattcatt tggttgtgtc tacaatagag aaaaacactt aacaacttta	420
ctccctaagg c	431
<210> 925 <211> 492 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 925	
tradacaagr adagrigita gratecayye acryaarrar accrearyy rareaareaa	60
ttaaacaagt aaagttgtta gtatccaggc actgaattat accttcatgg tatcaatcaa agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca	60 120
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata	
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca	120
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata	120 180
agctatgate agaattttat gtaactgett aateaettet ttaacaagtg tacegetaca ggtaacatta aacgteteta gcaatgatet ttategggtt etettgeett gaetgaaata ttattaatae ttettatate eattaacata aaataaettt ttgttgagea aaaatagtgt	120 180 240
agctatgate agaattttat gtaactgett aateaettet ttaacaagtg tacegetaca ggtaacatta aacgteteta gcaatgatet ttategggtt etettgeett gaetgaaata ttattaatae ttettatate eattaacata aaataaettt ttgttgagea aaaatagtgt gaaaacatta agatgaatgt gegetttgga aatgtttaaa tagatatgaa atgattaaat	120 180 240 300
agctatgate agaattttat gtaactgett aateaettet ttaacaagtg tacegetaca ggtaacatta aacgteteta gcaatgatet ttategggtt etettgeett gaetgaaata ttattaatae ttettatate eattaacata aaataaettt ttgttgagea aaaatagtgt gaaaacatta agatgaatgt gegetttgga aatgtttaaa tagatatgaa atgattaaat aaaateacag tettgtgeaa eateeatage ttacagttat ttggeaacta tgaaaceaca	120 180 240 300 360
agctatgate agaattttat gtaactgett aateaettet ttaacaagtg tacegetaca ggtaacatta aacgteteta gcaatgatet ttategggtt etettgeett gaetgaaata ttattaatae ttettatate eattaacata aaataaettt ttgttgagea aaaatagtgt gaaaacatta agatgaatgt gegetttgga aatgtttaaa tagatatgaa atgattaaat aaaateacag tettgtgeaa eateeatage ttaeagttat ttggeaaeta tgaaaceaca gttaetaatg ggaatttaag aetttttaaa aaattgeeaa atngtaetta tttggtatat	120 180 240 300 360 420
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgtttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag actttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210> 926 <211> 471 <212> DNA <213> Homo sapiens	120 180 240 300 360 420 480
agctatgate agaattttat gtaactgett aateaettet ttaacaagtg tacegetaca ggtaacatta aacgteteta gcaatgatet ttategggtt etettgeett gactgaaata ttattaatae ttettatate cattaacata aaataacttt ttgttgagea aaaatagtgt gaaaacatta agatgaatgt gegetttgga aatgtttaaa tagatatgaa atgattaaat aaaateacag tettgtgeaa cateeatage ttacagttat ttggeaacta tgaaaceaca gttactaatg ggaatttaag aetttttaaa aaattgeeaa atngtaetta tttggtatat gaaagagggt atteagetat taacteagta nttaataaae cattgatatg naatttttae etggaaatgg ge	120 180 240 300 360 420 480
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgtttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag actttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210> 926 <211> 471 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> n=a,t,g or c <400> 926	120 180 240 300 360 420 480 492
agctatgatc agaatttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgtttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag actttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210 > 926	120 180 240 300 360 420 480 492
agctatgatc agaatttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag acttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210> 926 <211> 471 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 926 aactactaca tttaatagcc ttcttctcta acacagtaat ttttattaa aaaggagact aacagaagt caggggtagg tggttctcca tgactgcaaa taataataat aatgatgatt	120 180 240 300 360 420 480 492
agctatgatc agaattttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag actttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210 > 926 <211 > 926 <211 > DNA <213 > Homo sapiens  <220 > <221 > misc feature <223 > m=a,t,g or c  <400 > 926 aactactaca tttaatagcc ttcttctcta acacagtaat ttttattaa aaaggagact aacacagaagt caggggtagg tggttctcca tgactgcaaa taataataat aatgatgatt tttttaatg tacagctctc acacaaattt cattttgtga acacactggt aagtacacga	120 180 240 300 360 420 480 492
agctatgatc agaatttat gtaactgctt aatcacttct ttaacaagtg taccgctaca ggtaacatta aacgtctcta gcaatgatct ttatcgggtt ctcttgcctt gactgaaata ttattaatac ttcttatatc cattaacata aaataacttt ttgttgagca aaaatagtgt gaaaacatta agatgaatgt gcgctttgga aatgttaaa tagatatgaa atgattaaat aaaatcacag tcttgtgcaa catccatagc ttacagttat ttggcaacta tgaaaccaca gttactaatg ggaatttaag acttttaaa aaattgccaa atngtactta tttggtatat gaaagagggt attcagctat taactcagta nttaataaac cattgatatg naattttac ctggaaatgg gc  <210> 926 <211> 471 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 926 aactactaca tttaatagcc ttcttctcta acacagtaat ttttattaa aaaggagact aacagaagt caggggtagg tggttctcca tgactgcaaa taataataat aatgatgatt	120 180 240 300 360 420 480 492

ctgctcacca acttctcgta t agatctcctg cttgaggtgg t gacgtgtctc tggctgcacc c <210> 927 <211> 318	tcgacttngc	tgcagcagct	gggttcttct	ccgactccag	360 420 471
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature</pre>					
<pre>&lt;223&gt; n=a,t,g or c &lt;400&gt; 927 acgtaaaccc agacatgctt c taaggtaaaa ggagaaattt a gaacaatgag gtacaacaag g ggatgccaca cggcttaagc c tgaattgcag attccagtga t tcttgagatg ctancaag</pre>	aaaataatta gaatgtaaag cagtccatag	aatgttaggt agaaacacag gtaaagcaag	ggaatttaca acacatttga aattctccct	aaagtgaatt aacatteete tgteaettet	60 120 180 240 300 318
<pre>&lt;210&gt; 928 &lt;211&gt; 295 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>					
<pre>&lt;400&gt; 928 ttcgtaaaac nataaaacaa t tacctttcgt agatgttttc t tgtatattat atatcaacac t tacaatatat taccggtaca a atcacttttc atgactaggt a &lt;210&gt; 929 &lt;211&gt; 188</pre>	ttcttaaaac ttaaagaata ctattcaggc	atatagttat ataattagat aagcttatgg	atgtttagct tcacagagta gaatgacaaa	tacatattta cggtgggaaa aaaggantga	60 120 180 240 295
<pre>&lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c &lt;400&gt; 929</pre>					
ttcaattaaa tgtaatttat t ttgataccac aacacaatgt t tttaaagaac atagnaattt t cagaagat	tatacaccat	tttcacaacc	agggttgcat	tgaatncttt	60 120 180 188
<210> 930 <211> 316 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c					
<pre>&lt;400&gt; 930 gttttattca tgacaatctg g tacattcagg ggctccaccc g cttcctgcgg ggctcagtgt g ggaccacttt catctccgcc g ggagaagggg aataaaagcc g</pre>	gcagccaaag ggtctggcag atggggaacg	cccgccctcg gaaccggaag ctngccccga	gccgnnatga tgcagcagca tgcagttcct	tcagttccag tcaacgccag ggggccctgc	60 120 180 240 300

gggagggggg tcgtag	316
<210> 931 <211> 324 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 931 taaatgtaca tttactataa aagctgttgc attttagaaa acttgttgtt tttattttt actgtttctc agaggcattt tagaataaat actttaaatg aaagttagta taaccgatat agaacactgg cccacccaga gcagtaacat cttttggacg gactcacata tgaggtggga tcatttcagt ttgttaaatc ttacactgcg tataggataa ctataatatg tattgcatta atcacactac atgggaaggg naatgtcagg ggaggttcgc ctaggtggaa aaaaccaaaa qqttacccca tttatttta ttaa	60 120 180 240 300 324
<210> 932 <211> 377 <212> DNA <213> Homo sapiens <220>	
<221> misc feature <223> n=a,t,g or c	
teaagatggc atctttaatc acattggcca aggccntagg ttccctctgt teaggccace ttagccacac acceacetg gccatateca gaacacttet accaggtggg ccctgcctgt tggccactga tgtgggaacc tgaggtcaca tcagtctgtg gactcctggg ttaggtgacc cttntgcctt gaggtctgct ggacacctgg ggcatgggat ccagtagtcc tgaggtcact cttttggcca tctccagctg ntcctagggg gacatggctc aggcccgntc ctgggggcag ggggttggcg gtggcatgag gtggggttgg gggaggagga cgtntctcca catttgcagc tggctttcct cctgggg	60 120 180 240 300 360 377
<210> 933 <211> 330 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 933 ttttttttt acggtagcaa aggaaganct ttattcagga ggcgggggct ctgggctggc antngggnat gcagggagac cctggncagt aggcacccag caggatggca ttgatgtgct ccagggtcag gttgctgaag accatgttga gatgctgtat cccgtgcagg gcagcaggtg	60 120 180
cacaggetgt ggetggegge cetgecacan gecacagage teggtgetge gggtegecae egtgteatea ecateeteat agageacace cacagggtee gtgtagggga ageegtggte gtagatgtag gtneggggeg tgggeaggee	240 300 330
<210> 934 <211> 383 <212> DNA <213> Homo sapiens <220>	
<2215 misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 934 ttttttttt ggcaggcatg gttcaggctt tactgggcat cacacggagc tggggtaggg acccagcaaa gggagcaggg catacagatg gtctttgagg acagtgctag ggagctcaga gatcagtctg gcttctcaaa gaagagaaaa gcactgacag gaaaagcagt caggttggcg ttagtgcagg gaaagggaag acgttaggag ggggactttg atgggaggga cagtgggga</pre>	60 120 180 240

gctgaagctt ttaaagagcc tcgatgccgg gggagggatg atnttagaag gaaagggaag cccaatgagg cctttgggga agagaagaga ntagaaagaa gggaaaaagg aagaaggcca gtcccaggga ttcaggcttt tcc	
<210> 935 <211> 429 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 935 tttttttttt ttctgatttc atcttttatt aaaagctgag agttaaagaa ctgtagggat</pre>	60
aactaagtcc acctcaaagt ccagacagaa actgccctcc caaagaaaca atgtttcttt	120
aaaacaaata ccacaccttc ccagatatta tgggtaggta agtgactagg ttttgcagat	180
taatctatag ctgcccatgt gcatgtagtc cagaaaacat gccaagaagg aagagctctg	240
aaccagacac agaaaggcag tgtggcttcc tcgctcaagg ggaatgcaaa gggctaagag	300
cctgggcttt caagcagctg ttatgctaga tgaggaaaat gcaaacagat tcaatctctg	360
gggatattgc tgccaacatg ctaagccctt caccagttgc cttgatttcg aaggcagttt	420
cccctatgt	429
<210> 936 <211> 377 <212> DNA <213> Homo sapiens <220>	
<221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 936 gatttaaaat acatctttca tacattgttt aaaaggaaaa aggaatcatg tcaaaatgtt</pre>	60
tcaggaaatg atttaagtta gatataaaga ncatagttct gattttgaag tgttagtgga	120
actcaaacag aaatgattag ngctctctta agancatgac atgattctta aagtgggcta	180
tttcagagcc tagaaataac actgtattac tgactaatgt ctacagagta ctgcaaaaga	
tgctggaata ggaaaaggca gggtgggtgt gaaantttta atttttaaat aggcaaagco	300
cctgtctggg ggtattgtca ggtaactttc nggaaatccn aggaggaaaa tgatggttag	360
gggnccacnc caggggg	377
<210> 937 <211> 259 <212> DNA <213> Homo sapiens	
<400> 937 ttttccaggt aacacatttt tattgtaaaa tatccacttg agttgaaaaa gttgtcaatt	60
acaagtttaa ggatacgtta tatatttggc ttagttgtga aaataatgta catttagaat	120
ttaacatcac ttaaatccat tccattgtac caatattatt tatgcatcct tatacttaag	180
aatagcatct actaagacaa ttatgcagaa aagatcccag ggataatgca acacctaaat	240
ataatggtgg gggagataa	259
<210> 938 <211> 260 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 938 acttttcata aatttattta tgaaattaaa tgtggtttct ggcttggaga aggaatagtg	
caagagtgac tgtccatgct gctgaatcct gtgggctcca cgccagctcg ccaggccctg	
gntctgctcc tggngcccct tggcaggaca gggcgccatn tncacacacc cgctgcctgc	
gntgtgggtc antcctgtnt gctgagccac agaattcggt ctntctctta tggcttctca	
cgttcacgag cgtaaggcaa	260

```
939
375
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 939 agcattgtct tatttattaa cataattgaa acattttgca taaaactctt gcccatgact
                                                                          60
attctagcaa caaaattgta ctcaaaatat ttcactgtga aatggtattg caacttgaat
                                                                         120
atcatttttt attaatgaat tgatttccat aaagcaaatc ttactcttaa aatggcagat
                                                                         180
tatgtgatca aaaagcgatt caaaaaagct tccccctcct catgccaacc ctcaagacca
                                                                         240
                                                                         300
tgtggatcca gctgaatcct cagccctggg nctagactan ggttgagggg aagagccgtt
aactcattcc taaccagaca ggctaatngg gcactccaac tcacacttca aggggccnca
                                                                         360
                                                                         375
tggacagtcg ggtgt
       940
232
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 940 ccncaaggat gagtttattt cacatgtcac ccagcatgca actgaacaca tcacagaaac
                                                                          60
caaatactta ctaaattagt gtgcattgct ttacaaggaa aagtcaataa aatggcatag
                                                                         120
tgaatatatc attggncttg aagncagtgt tcatctgaaa atgggnacaa taatcatgnc
                                                                         180
                                                                         232
aataccnttc agntaatcat attctgaaaa ttaaatacat tgtattacaa tg
       ĎŃÁ
Homo sapiens
       misc feature
n=a,t,g or c
60
acagtgctgc gagatcgntg gcagagaagg cttcctccag cggctgggtg gtgaaggacc
                                                                         120
ctggctcttc tctcggggcg acccctcagt gctcggcagt catactgggg tgcgagagag
                                                                         180
gtgggcagca gntcagcctc cccccgntgg gatgcgaaag tttnttggtn tcagcttcat
                                                                         240
                                                                         277
ttccqtqaaq qqcaccnnqa actcqaagcc cttccag
       942
405
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 942 cagagnenag tttattgeac tgacteaaag cacaactaaa aattaaaace agaaagaaaa
                                                                          60
ctgtacaaag cacgaagcta caactttaaa agcatcacct agacgcgggt ttaattgcac
                                                                         120
tacagnccat gggtgaggag agctttncat ccgtgagcgc cgggcaagga caacagacac
                                                                         180
agagagatgc agcccgcctg ggntcatctg ctgcaccaac ttttacaaaa ggttctagaa
                                                                         240
                                                                         300
aaqqqaaqtn tnaagtcaga tctgggattt cggcatcttg acctcatttg gacatggaaa
                                                                         360
acctecacet atgtggetgg etgggteetg teagagaaca tattttatea ceetecacet
geggeetggg ggnteeetga caccaaggae tnggeetggg caggg
                                                                         405
```

```
943
471
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 943 tttttcgttt ccatacagtt ttatttgcaa tttgttggaa ccatggagaa caatcggcag
                                                                            60
atacacatgt tgcttctggg aacagcattc aactccagat gctttttctg ctaaggagca
                                                                           120
gggccacagg tnncaancna cccagtgctg tgctgcgcgg agggctgtac tgaaggttct
                                                                           180
gaaggcctgg ngagtccccc tcacggccag aaggagagac ccggcttcgg cttcatggcc
                                                                           240
ggcctcccgc agtntctgcc cagctcctct gcatcccagc gcccttgctg ggaggctagc
                                                                           300
caagaggtgg gtcaacaata cgtgggatag aaggggagtg ggagacacan tttcaccagc
                                                                           360
agcttggcat ccaggggagc agggaaagaa gttntttggg tcacaatttg ggaatcattt
                                                                           420
cacctttcaa gaaattaagg acagggcaca gcgttaaggg gggtnttttn c
                                                                           471
<210><211><211><212><213>
       944
424
       ĎΝĀ
       Homo sapiens
       misc feature
n=a,t,g or c
<400>
agagétetag cacatttatt egggagagta ageetgggaa agaetaaggg agtggtggea
                                                                            60
                                                                           120
qqqaqaaaqq ctgtggggaa tcagagcggg tgctcagttg ggtcttgaag ganannnnnn
ngnnggtggg aggtgggttn ccgaggatat cttggttgaa gacttggggg tcaagacaaa
                                                                           180
gggacttagg gggatggggt ctggttagag ttggggaggg ggcctaggac atccgtgcag
                                                                           240
agtctgggga ggttggggtg ggagagtctg tacaagtttg gtgttgggtg ttctagttgg
                                                                           300
cctggtgtcc aagagttggg gcagtccgaa aaagggttcc agagtctggt gtggctggct
                                                                           360
                                                                           420
ggggtttcac ggcanaaaat gggctggaag gggcagttgt aaactgtctg gttgcaaggn
                                                                           424
aaag
        945
574
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 945
ttaaaaagta gactatatat atatatatct tcatatatgc ctatttacat ataaatagat
                                                                            60
atatatacat atacacgcat ctataaatta cattctatgg agagttctct ttcttcctcc
                                                                           120
                                                                           180
tatctttggc cagggcctct gnttctcctg agaggtggct ggtggtggct cctgtgaggg
aggaaaggca gctgggtgcc ccctccccca gcccttccca ctgatatctg ctgcgagttt
                                                                           240
tacattctac tttcgttgcc atggtttctg tatcctagga gagaggcgat gcgganctcc
                                                                           300
gccagccctg cgagggaggg aagcagcccc atggcaggtt ttctgtctgt cctaagagct
                                                                           360
                                                                           420
ttctgcattt actgggtgag agagagggca gctgtgcagc gttcggcctc caattccatt
ttaattttgt ttctttgttt gtctttcctc aaatatacag tccatcacct tggctccagt
                                                                           480
gcatgtcacc aaaaattctc cagggatttc atagtttgga cctcggtggt gtggctngcc
                                                                           540
                                                                           574
aggatatcca tgcaggangc tgcactctga nagc
        946
429
DNA
Homo sapiens
        misc feature
```

(225) H-a,c,g 01 0					
<pre>&lt;400&gt; 946 ttgacgttgg cagtgacatt cggagcccct caccccacc agtggcagta gccagaagag cccagatgag gaaattgagg gctagtcccg agagcttgtg gggcagcccc cgcccttctt tggtatttcc ggacagcccg tttggccga </pre> <pre>&lt;210&gt; 947 &lt;&lt;211&gt; 467 &lt;&lt;212&gt; DNA &lt;&lt;213&gt; Homo sapiens</pre>	aggettaggt geeaggaagt eteagtgagg gtggttgett eetgggggea	ggggacagga aagggtgggt gcctcaggtc ctctcttgcc ctgggagggc	ggcgttggca atgtgatgtg acacagtaag tgggctacag tcggtgggag	gaaggcacac tcctgggaga gtgcgaagga gaggacgcag ctcttgttcc	60 120 180 240 300 360 420 429
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>					
<400> 947 ggtacaaaag gtgtctttat	tgaggtctgg	gttaaaatta	ggcacttggc	cagagcagca	60
gcttaaatat gaggcaagca	gtcaggggtt	agccatgcct	gggnntgggt	tggggtcatg	120
aggctacagg cacagactgt	ccccaggtgg	acagaagttn	ggagcaggan	nnnnngnnng	180
nnngggccgc anancagcct	gggtcagagg	cctggtgggc	nagcccagtg	ggactaggca	240
ggaagctctg gtggcaggtc	cagcagngag	gggaccagga	tctcttgctc	cacgtgcccc	300
ttagacccag gcctgagcct	ctggnagngg	gcagccgcac	ttggcagggc	ggtcttccca	360
agcctcactt ncttcacctt	ngcatcgtag	gtgccttgca	ttcttgtagg	cgctcacgta	420
gccactgtcg tccaggatgt	cctgccgtcc	cgcaatgccc	ttgccct		467
<210> 948 <211> 852 <212> DNA <213> Homo sapiens					
<400> 948 cttgcagctg cccacctcac	cctcacctct	ggcctcttac	tcaccctcta	ccacagacat	60
ggctcagtca ctggctctga					120
ccaaggcagt gatggagggg					180
cgccaaggtt gtccgcagct					240
tatcctgttc ttgccccgca					300
ctgggtgcag cagctgatgc					360
gggctgcagg aaggacaggg					420
ctgcaagagg actgagcggt					480
agccctggag accccaccag					540
gaggctatgc tcaggggccc					600
cctgctttaa ccaccccatc					660
gcaggccagg tccagagaga					720
gcaggactgt ccccttgaag					780
acaccccacc tcttccttgt					840
cttcccaccc gc					852
<210> 949 <211> 1364 <212> DNA <213> Homo sapiens					
<400> 949 aggggactgg ggccaagagc	cgggagcgcg	ggcgcaaagg	caccagggcc	cgcccagggc	60

120

gccgcgcagc acggccttgg gggttctgcg ggccttcggg tgcgcgtctc gcctctagcc

```
atggggtccg cagcgttgga gatcctgggc ctggtgctgt gcctggtggg ctgggggggt
ctgatcctgg cgtgcgggct gcccatgtgg caggtgaccg ccttcctgga ccacaacatc
                                                                     240
gtgacggcgc agaccacctg gaagggcctg tggatgtcgt gcgtggtgca gagcaccggg
                                                                     300
cacatgcagt gcaaagtgta cgactcggtg ctggctctga gcaccgaggt gcaggcggcg
                                                                     360
cgggcgctca ccgtgagcgc cgtgctgctg gcgttcgttg cgctcttcgt gaccctggcg
                                                                     420
ggcgcgcagt gcaccacctg cgtggccccg ggcccggcca aggcgcgtgt ggccctcacg
                                                                     480
                                                                     540
ggaggcgtgc tctacctgtt ttgcgggctg ctggcgctcg tgccactctg ctggttcgcc
aacattgtcg tccgcgagtt ttacgacccg tctgtgcccg tgtcgcagaa gtacgagctg
                                                                     600
ggegcagege tgtacategg etgggeggee accgegetge teatggtagg eggetgeete
                                                                     660
                                                                     720
ttgtgctgcg gcgcctgggt ctgcaccggc cgtcccgacc tcagcttccc cgtgaagtac
tcagcgccgc ggcggcccac ggccaccggc gactacgaca agaagaacta cgtctgaggg
                                                                     780
                                                                     840
cgctgggcac ggccgggccc ctcctgccag ccacgcctgc gaggcgttgg ataagcctgg
ggagccccgc atggaccgcg gcttccgccg ggtagcgcgg cgcgcaggct cctcggaacg
                                                                     900
                                                                     960
teeggetetg egeecegacg eggeteetgg ateegeteet geetgegeee geagetgace
ttctcctgcc actagcccgg ccctgccctt aacagacgga atgaagtttc cttttctgtg
                                                                    1020
                                                                    1080
cgcggcgctg tttccatagg cagagcgggt gtcagactga ggatttcgct tcccctccaa
gacgctgggg gtcttggctg ctgccttact tcccagaggc tcctgctgac ttcggagggg
                                                                    1140
cggatgcaga gcccggggcc cccaccggaa gatgtgtaca gctggtcttt actccatcgg
                                                                    1200
caggecegag eccagggace agtgaettgg cetggaeete eeggteteae tecageatet
                                                                    1260
                                                                    1320
ccccaggcaa ggcttgtggg caccggagct tgagagaggg cgggagtggg aaggctaaga
                                                                    1364
DNA
Homo sapiens
<400> 950 gggcaegege accaeegeee geagegeage eegegeeege geaggeeeeg eageeggeee
                                                                      60
agcccgccgc caccggccgc ggctgcctcc agaggacctg gtccagacaa gatgtgaaat
                                                                     120
ggagaagtat ctgacacctc agcttcctcc agttcctata attccagagc ataaaaagta
                                                                     180
                                                                     240
tagacgagac agtgcctcag tcgtagacca gttcttcact gacactgaag ggttacctta
cagtatcaac atgaacgtct tectecetga cateacteac etgagaactg geetetacaa
                                                                     300
                                                                     360
atcccagaga ccgtgcgtaa cacacatcaa gacagaacct gttgccattt tcagccacca
gagtgaaacg actgcccctc tccggccccg acccaggccc tccctgagtt caccagtata
                                                                     420
ttcagctcac accagaccgc agctccagag gtgaacaata ttttcatcaa acaagaactt
                                                                     480
                                                                     540
cctacaccag atcttcatct ttctgtccct acccagcagg gccacctgta ccagctactg
aatacaccgg atctagatat gcccagttct acaaatcaga cagcagcaat ggacactctt
                                                                      600
                                                                      660
aatgtttcta tgtcagctgc catggcaggc cttaacacac acacctctgc tgttccgcag
actgcagtga aacaattcca gggcatgccc ccttgcacat acacaatgcc aagtcagttt
                                                                     720
                                                                     780
cttccacaac aggccactta ctttcccccg tcaccaccaa gctcagagcc tggaagtcca
gatagacaag cagagatgct ccagaattta accccacctc catcctatgc tgctacaatt
                                                                      840
                                                                      900
gcttctaaac tggcaattca caatccaaat ttacccacca ccctgccagt taactcacaa
                                                                      960
aacatccaac ctgtcagata caatagaagg agtaaccccg atttggagaa acgacgcatc
cactactgcg attaccctgg ttgcacaaaa gtttatacca agtcttctca tttaaaagct
                                                                     1020
cacctgagga ctcacactgg tgaaaagcca tacaagtgta cctgggaagg ctgcgactgg
                                                                     1080
                                                                     1140
aggttegege gateggatga getgaeeege caetaeegga ageaeaeagg egeeaageee
ttccagtgcg gggtgtgcaa ccgcagcttc tcgcgctctg accacctggc cctgcatatg
                                                                     1200
aagaggcacc agaactgagc actgcccgtg tgacccgttc caggtcccct gggctccctc
                                                                     1260
                                                                     1301
aaatgacaga cctaactatt cctgtgtaaa aacaacaacc c
```

951 6611 DNA Homo sapiens <400> 951 tgactgcatc acctggtctg tgaattttcc attagaagct tggtgtgctg ttaggtgaaa 60 120 gacttgctca gctatgcgtc attgggtttt atcaacatat aggcgaaaaa aatcctggtc tctgagtgta cagctgagat gaaaatttct tttattggag gaagtattga gtgtgtgctc 180 240 tcaaatgcgg cctcagttga gtagtgcatt cctgagtttt ggaagcaaat ttgcaaacaa ttgagagtcg tacagtgggt gttctaactg gattcaggtt ttttctaatg taattttttc 300 acacgtaaat taaaaagttt agaaatgtca cacataactt cataacactt tatggagaaa 360 tggttgtact tttaattttt ttcttttat ttatactcca actgactgag cagaggttgt 420 480 acttctaaat aactttgtgg aagtttttag taccataatt tttataattt tcattccagt cctttgatat ttatgacagt acttctgaag cgcttactga gtgccggaca ctgttgtaag 540 600 tgctttacgg aacttgactt tttttttttt ttgagacgga ctctcgctct gtcgcccagg 660 ctggagtgca gtggtgcagt ggctcgatct cggctcactg ccacctctcc ctcatggttt 720 caaacacttc tcctgcctca gcctcccagg tagccaggat tatagccgcc cgccaccact cccgactaat tttattttgt atgttctttt ttagtagaga cggaggagtt tcaccatgtt 780 ggccaggctg gtatcgacct cctgacctca agtgatgtgt ccatctcggc ctcccaaggt 840 900 ttttgaaaag gagtttcgct cttgtccagg ctggagtata atggtgcgat ctcagctcac 960 cgcaatctcc gcctcccaga ttcaagcgat tctcctgcct cagcctcctc aggagctggg 1020 1080 attacaggcg cccaccgcca tgcccggcta atttttgtat ttttagtaga gacggggttt cactatattg gccaggctgg tctcgaactg ctgacctcaa gtaatccgcc tgcctcagcc 1140 1200 teccaaaqtq etgggattae agaegtgate caccaggate acaccaggee gegeetggee tgctttcatt ttaaaagtca aatttgtcat ccgcctcagt gcttgtaatc ttttctgagt 1260 1320 gagatactga aatttgcagt ttcgttttgc ttgcacttgt tcactggacc agtagtcact 1380 gttaaatgta aaagtateta etteetetga aagtttttta tteettatt teetgeetgg 1440 gcttgtcctc caccctacat gtatgcgtag tagatttagt gtttgttatc ctaaccttta 1500 ggtttaggga ttgactgggt ttctgacttt ttatttggcc aatgaggacg atacagaaaa 1560 tgaagcattg gtcattatca cattttaacg ctgaaaaagt aagaaggaca accccggaat 1620 aaaatqatat caqtatcaaq ataaaagttt ggaatgggag aaaaattctc aaagcctgaa 1680 agaaaatctg tagttacttt tggtgacgct gtccagttcc cacaatgtat cattccttat 1740 ctgaaactag acatcctctg cagccagaag aacaagaagt aggcattgac cccttgtcca gttactctaa caagtctgga ggagattcaa ataaaaatgg aagaagaaca agttctactt 1800 1860 taqactctga agggactttt aattcctata ggaaagaatg ggaagaacta tttgtaaaca 1920 acaattactt ggcaacaata aggcagaagg ggattaatgg gcagctgaga agcagcaggt 1980 tccgcagcat ttgctggaag ctatttcttt gtgttcttcc tcaagacaaa agtcaatgga taagtagaat tgaagaatta agagcatggt atagcaacat taaagaaata catattacca 2040 acccgaggaa ggttgttggc caacaagatt tgatgatcaa taatcctctt tcacaggatg 2100 2160 aagggagtet ttggaacaaa ttettecaag ataaagaaet tegateaatg attgaacaag 2220 atgtcaaaag aacgtttcct gaaatgcagt ttttccagca agaaaatgtg agaaaaattc 2280 ttacagatgt tcttttctgt tatgccagag aaaacgagca gttgctttat aaacagggca tgcacgaact gttagcacct atagtetttg teetteactg tgaccaccaa gettttetac 2340 atgccagtga gtctgcacag cccagtgagg aaatgaaaac tgtcttgaac cctgagtatc 2400

tggaacatga tgcctatgca gtgttctcac aacttatgga aactgctgaa ccttggtttt

caacttttga gcatgatggt cagaagggga aagaaacact gatgactccc attccctttg ctagaccaca agatttaggg ccaacaattg ctattgttac taaagtcaac cagatccagg

atcatctact gaagaagcat gatattgagc tttacatgca cttgaacaga ctagaaattg

caccacagat atatgggtta aggtgggtgc ggctgctatt tggacgagag ttccccctgc

2460

2520

2580 2640

2760 aggacettet ggtggtetgg gatgeettgt ttgcagaegg ceteageetg ggtttagtag attatatett egtageeatg ttaetttaea teegagatge tttgatetet agtaaetaee 2820 agacctgtct cggccttctg atgcattacc cattcatcgg ggatgtacac tcactgattc 2880 ttaaggctct gttccttaga gatccaaaga gaaatccaag accagtgact tatcaattcc 2940 3000 atccaaattt agattattac aaagcacgag gagcagacct catgaataaa agccggacca atgccaaagg tgctcccctg aatataaata aggtctctaa tagcctgatt aattttggaa 3060 3120 gaaagttgat ttccccagca atggctccag gcagtgcagg tggccctgta cctggaggca acagcagtag ctcctcctct gttgtaattc ctaccaggac ctcagcagag gccccaagcc 3180 atcacttgca acagcaacag cagcagcaga ggctgatgaa atcagaaagc atgcctgtgc 3240 aattgaacaa agggctaagt tctaaaaaca tcagttcatc tccaagcgtt gagagtttgc 3300 ctggaggaag agaattcact ggctctccac cttcatctgc tactaaaaaa gattcctttt 3360 ttagcaacat ctcacgttct cgctcacaca gcaaaactat gggcagaaaa gaatctgaag 3420 aagaattaga agcccaaatt tccttccttc aagggcagtt gaatgacctg gatgccatgt 3480 3540 gcaaatactg tgcaaaggtg atggacactc atcttgtaaa tattcaagat gtgatattac aagaaaattt ggaaaaagaa gatcaaattc tggtttccct ggcaggatta aaacagatca 3600 aagacattct aaaaggttcc ctgcgtttta accagagcca gctagaggcc gaagagaacg 3660 aacagatcac cattgcggac aaccactact gctccagcgg ccagggccag ggccgaggcc 3720 3780 aaggccagag cgttcaaatg tcaggggcca ttaaacaggc ctcttcagaa acgccagggt gcactgatag agggaattcc gatgacttca tcctgatttc caaagatgat gatgggagca 3840 3900 gtgccagggg ctccttctcc ggccaggccc agcctcttcg caccctcaga agcacctctg 3960 ggaaaagcca ggccccagtc tgctccccac tggtgttctc agatccactg atgggcccag cctcagcttc ctccagcaac cccagctcca gtcctgatga cgacagcagc aaggactctg 4020 4080 gcttcaccat tgtgagtccc ctggacatct gaccacagtg cccagtcctg ccccacaggg 4140 atctagccac cetteagtgg ceceaaggee agaetgagge teatecagtg gagaacette 4200 ttaaaccact gcttccttcc cggcatgcat ttggcattgg tccagccctt tgaaacccct tagagagaag catatatggc cacaaagcac agaggcttag gtttgccaca tgcagacagg 4260 gctttctggg cccttaccta atccccaccc gactcttgct ctgagttaga gctgagttac 4320 gtacccagta tcacactcac agttagaaaa gaccgaatca caatttagaa tcacttttcc 4380 tctgtcccct tctccccagc taagaatgtg tggcacctcc atcagttata cttagaagga 4440 4500 gcagaaatag ttattttcgt atcttctatc cctcaaagca tcagacatgg gaaaattggt ttataccaag aaagcttcct ctgtggaaat ctgtctcagc ctactttatt cctgcattgg 4560 4620 gaagccatat cgcagagcta aatgcaatag aatgaaccag aactagtgga ttccagggct gggggaaaaa aaaaaaagaa aaaacctcat tactgacctc tcaaagttat aaggatctct 4680 gcaaacagga tctaagctta ggaataatat ttaggtgtga tatagtgtta gatttttttg 4740 4800 atgtattaaa gaatgcatct ccaatcctta ggccatatca actttggcca tcaatatctc 4860 tccttaaaca attatatttc accttttaga atctttcata gccagaaaac aagattactg taagccagtt ttagctgcac tgatttcaaa agatataaga atattactat ccttcaaatg 4920 gaaaatgcga ccttgacttt atgggataaa catctttcag acagtcagtt ttctagtcag 4980 gtttctctgg tttcagagct gtatatacct gtcaactgag gaataaaggg aaaaacccaa 5040 5100 gttcattccc acccaaagtc agaatccctc attggcctta aggtagcagt cataagacag agaattggac ctagagtccc ttctgtgggg aataaggata cctagagaac attccacatg 5160 5220 ccaagaggat gcaggatttc tacacaaccc cttcccttct tggaagtcaa gtgtaggtac tgcagggcct gtgctcagct gtgaaccccg tatcctgggc cccactgccg ggaccgggtc 5280 tgacatgcca gtgccttcct gggctgagca cagattagag actctccccc ttgtcagtca 5340 gcaccttagg aaaccatgat gggcacagag catcacatga gctgtttctc tccttaaaga 5400 agatecetgg aaaggatget ttteetetee tttgeetgeg caggaattet aacaggagtg 5460 ggtgaggatg gcagagggac acagtgcctg tctcgcctcc atcagggaga gcagccatgc 5520

```
cagggatgac tagctctttg agcctgtcct cagaggatgg cgaggcagcc gggcagtgga
                                                                      5580
ggccttcatg gtaacaaatg aaagctcagt atagaggaac agacactgtt tacgtccctc
                                                                      5640
                                                                      5700
ccactgctaa ccttatatat ctctatagac aaatgtgata atgacatgat ttcccacctg
                                                                      5760
ccctccaaga aaatggtgac tcactctcaa gtcagctact gtagagaggg ttctaattgg
ttctgcaatt tgctcttaaa ctctagcagg gaactctcct cttaccacat cagcatgtaa
                                                                      5820
                                                                      5880
qqtqaataat aactctggtt ttgccagaca gcaggttgtc tgaccttcaa ccactgggca
attgcctggc agatgcacac agtagctccc tggcttctgg ctctgagtgt tcctctcagc
                                                                      5940
acctctgagt aagctgctgc caagcacata tccctatgac aacactttgt aaaagccgcg
                                                                      6000
gggcccccat acagcgagtg accttgcaac tgtgcagggt tgccattggt cactttctca
                                                                      6060
ccttgggaag gtgtcagtgt tttcagttct aaggtaagag gtgtagagct gttcccacca
                                                                      6120
gggctctggg acagactgga aaggaccaca gacctggcca tccctgggca gcagggccag
                                                                      6180
tgtcacctgc tgacctctag tatttccttt gccctagagc tagagtcatg atagctgagg
                                                                      6240
gtcactcgcc ctgcaagagt cactaggcac ccaccatgcc aataaggctc tccgctggct
                                                                      6300
ccctgcagtt ggctgggtgt ttaatagtca ctgaaaactc ccagccctgc tgcacactag
                                                                      6360
aggraggtrc trtcggtrct rtccatrrtg tgrttrtgtg grcccragra agrtracege
                                                                      6420
ctccttggag gagagagaca tacaaggaca gtgggtcatg ggtagtacca gcctcaaatt
                                                                      6480
cccacaggct catactcaga caattgtatt actgccttat gttttttaag tgtttttta
                                                                      6540
aattottoat agttgagtat tatttgcaat tttattagtt acagtgctat taaagaatat
                                                                      6600
                                                                      6611
gtgctccttt t
       952
1056
DNA
Homo sapiens
^{<400>} 952 ttcttttat cattacatca aattgttttc ccaggcttgc gtaatggaat gtgaaggtaa
                                                                        60
                                                                        120
actgccttct ctgaaaattt gggaaacctg caaggagctc ctgcagctgt ccaaaccaga
gcttcctcaa gatggcacca gcaccctcag agaaaatagc aaaccggaag aaagccattt
                                                                        180
                                                                        240
gctagccaaa aggtatgggg gcttcatgaa aaggtatgga ggcttcatga agaaaatgga
tgagctttat cccatggagc cagaagaaga ggccaatgga agtgagatcc tcgccaagcg
                                                                        300
                                                                        360
gtatgggggc ttcatgaaga aggatgcaga ggaggacgac tcgctggcca attcctcaga
                                                                        420
cctgctaaaa gagcttctgg aaacagggga caaccgagag cgtagccacc accaggatgg
cagtgataat gaggaagaag tgagcaagag atatgggggc ttcatgagag gcttaaagag
                                                                        480
                                                                        540
aagcccccaa ctggaagatg aagccaaaga gctgcagaag cgatatgggg gcttcatgag
aagagtaggt cgcccagagt ggtggatgga ctaccagaaa cggtatggag gtttcctgaa
                                                                        600
                                                                        660
gcgctttgcc gaggctctgc cctccgacga agaaggcgaa agttactcca aagaagttcc
                                                                        720
tgaaatggaa aaaagatacg gaggatttat gagattttaa tatcttttcc cactagtggc
                                                                        780
ccccaggccc cagcaagcct ccctccatcc tccagtggga aactgttgat ggtgttttat
tgtcatgtgt tgcttgcctt gtatagttga cttcattgtc tggataacta tacaacctga
                                                                        840
aaactgtcat ttcaggttct gtgctctttt tggagtcttt aagctcagta ttagtctatt
                                                                        900
                                                                        960
gcagctatct cgtttttcat gctaaaaata gttttttgtt atcttgtctc ttattttttg
acaaacatcc aataaatgct tacttgtata tagagataat aaacctatta ccccaagtgc
                                                                      1020
                                                                      1056
ataatatcct tgtaagtctc tttttctcca aggctc
       953
1050
DNA
Homo sapiens
^{<400>} 953 ttcttttat cattacatca aattgttttc ccaggcttgc gtaatggaat gtgaaggtaa
                                                                         60
actgccttct ctgaaaattt gggaaacctg caaggagctc ctgcagctgt ccaaaccaga
                                                                        120
                                                                        180
gcttcctcaa gatggcacca gcaccctcag agaaaatagc aaaccggaag aaagccattt
gctagccaaa aggtatgggg gcttcatgaa aaggtatgga ggcttcatga agaaaatgga
                                                                        240
```

tgagctttat cccatggagc	cagaagaaga	ggccaatgga	agtgagatcc	tcgccaagcg	300
gtatgggggc ttcatgaaga	aggatgcaga	ggaggacgac	tcgctggcca	attcctcaga	360
cctgctaaaa gagcttctgg	aaacagggga	caaccgagag	cgtagccacc	accaggatgg	420
cagtgataat gaggaagaag	tgagcaagag	atatgggggc	ttcatgagag	gcttaaagag	480
aagcccccaa ctggaagatg	aagccaaaga	gctgcagaag	cgatatgggg	gcttcatgag	540
aagagtaggt cgcccagagt	ggtggatgga	ctaccagaaa	cggtatggag	gtttcctgaa	600
gcgctttgcc gaggctctgc	cctccgacga	agaaggcgaa	agttactcca	aagaagttcc	660
tgaaatggaa aaaagatacg	gaggatttat	gagattttaa	tatcttttcc	cactagtggc	720
cccaggcccc agcaagcctc	cctccatcct	ccagtgggaa	actgttgatg	gtgttttatt	780
gtcatgtgtt gcttgccttg	tatagttgac	ttcattgtct	ggataactat	acaacctgaa	840
aactgtcatt tcaggttctg	tgctcttttt	ggagtcttta	agctcagtat	tagtctattg	900
cagctatctc gttttcatgc	taaaatagtt	tttgttatct	tgtctcttat	ttttgacaaa	960
catcaataaa tgcttacttg	tatatagaga	taataaacct	attaccccaa	gtgcataata	1020
tccttgtaag tctcttttc	tccaaggctc				1050
<210> 954 <211> 1230					
<212> DNA <213> Homo sapiens					
<400> 954					
gaatcaattc ctccaaaccg					60
gattatagga tatgacattt					120
attaatggct tgggctaaaa					180
tagagagagg ccaactcaga	cacageegtg	tatgctccca	gcagcaacgg	aggttcacgt	240
ccgcctgcag ggacagaaag					300
ctgtgtagcc accatgtgca					360
tgccaagcac cacaagacaa	agccaggtcc	tgaggacaag	ctgcatgacc	aatgcagtcc	420
ctggaagaag aatgcctgct	gcacagccag	caccagccag	gagctgcaca	aggacacctc	480
ccgcctgtac aactttaact	gggaccactg	cggcaagatg	gagcccgcct	gcaagcgcca	540
cttcatccag gacacctgtc	tctatgagtg	ctcacccaac	ctggggccct	ggatccagca	600
ggtgaatcag acgtggcgaa	aagaacgctt	cctggatgtg	cccttatgca	aagaggactg	660
tcagcgctgg tgggaggatt	gtcacacctc	ccacacgtgc	aagagcaact	ggcacagagg	720
atgggactgg acctcaggag	ttaacaagtg	cccagctggg	gctctctgcc	gcacctttga	780
gtcctacttc cccactccag	ctgccctttg	tgaaggcctc	tggagtcact	catacaaggt	840
cagcaactac agccgaggga	gcggccgctg	catccagatg	tggtttgatt	cagcccaggg	900
caaccccaac gaggaagtgg	cgaggttcta	tgctgcagcc	atgcatgtga	atgctggtga	960
gatgcttcat gggactgggg	gtctcctgct	cagtctggcc	ctgatgctgc	aactctggct	1020
ccttggctga gttcagtcct	cccagactac	ctgccctcag	cttggataac	caggctgggc	1080
tcagctcagc tcccacaaat	gacagcccct	taagcatgct	tctattagtc	acctaaccct	1140
ctgtcaccca gtctgttgct	gctccatggt	ggggccaaga	gtcacttcta	ataaacagac	1200
tgttttctaa taaaaaaaa	aaaaaaaaa				1230
<210> 955 <211> 2269 <212> DNA <213> Homo sapiens					
<400> 955 ccgtttcctc ccctcccctc	cacteggeeg	teceteette	ctcctccctc	ctccctcctc	60
ctcccgctcc tgaagagcgc					120
acgagtgcgg tgtcgctcca					180
cctgatcgtc tctggccggc					240
gccgagcagc caccgtcccg					300
		-		_	

```
360
ttcggaatca agaatatgga ccaggtagcc cctgtggcta acagttacag agggacactc
aagcgccagc cagcctttga cacctttgat gggtccctgt ttgctgtttt tccttctcta
                                                                     420
aatgaagagc aaacactgca agaagtgcca acaggcttgg attccatttc tcatgactcc
                                                                     480
                                                                     540
gccaactgtg aattgccttt gttaaccccg tgcagcaagg ctgtgatgag tcaagcctta
aaagctacct tcagtggctt caaaaaggaa cagcggcgcc tgggcattcc aaagaacccc
                                                                     600
                                                                     660
tggctgtgga gtgagcaaca ggtatgccag tggcttctct gggccaccaa tgagttcagt
                                                                     720
ctggtgaacg tgaatctgca gaggttcggc atgaatggcc agatgctgtg taaccttggc
                                                                     780
aaqqaacqct ttctggagct ggcacctgac tttgtgggtg acattctctg ggaacatctg
                                                                     840
gagcaaatga tcaaagaaaa ccaagaaaag acagaagatc aatatgaaga aaattcacac
                                                                     900
ctcacctccg ttcctcattg gattaacagc aatacattag gttttggcac agagcaggcg
                                                                     960
ccctatggaa tgcagacaca gaattacccc aaaggcggcc tcctggacag catgtgtccg
                                                                    1020
gcctccacac ccagegtact cagetetgag caggagtttc agatgttccc caagtetegg
ctcagetccg tcagegtcac ctactgetct gtcagtcagg acttcccagg cagcaacttg
                                                                    1080
                                                                    1140
aatttgctca ccaacaattc tgggactccc aaagaccacg actcccctga gaacggtgcg
                                                                    1200
gacagetteg agageteaga eteceteete eagteetgga acageeagte gteettgetg
                                                                    1260
gatgtgcaac gggttccttc cttcgagagc ttcgaagatg actgcagcca gtctctctgc
ctcaataagc caaccatgtc tttcaaggat tacatccaag agaggagtga cccagtggag
                                                                    1320
caaggcaaac cagttatacc tgcagctgtg ctggccggct tcacaggaag tggacctatt
                                                                    1380
                                                                    1440
cagctgtggc agtttctcct ggagctgcta tcagacaaat cctgccagtc attcatcagc
tggactggag acggatggga gtttaagctc gccgaccccg atgaggtggc ccgccggtgg
                                                                    1500
ggaaagagga aaaataagcc caagatgaac tacgagaagc tgagccgggg cttacgctac
                                                                    1560
tattacgaca agaacatcat ccacaagacg tcggggaagc gctacgtgta ccgcttcgtg
                                                                    1620
                                                                    1680
tgcgacctcc agaacttgct ggggttcacg cccgaggaac tgcacgccat cctgggcgtc
                                                                    1740
cagecegaca eggaggaetg aggtegeegg gaceaecetg ageeggeeee aggetegtgg
                                                                    1800
actgagtggg aagcccatcc tgaccagctg cctccgagga cccaggaaag gcaggattga
aaatgtccag gaaagtggcc aagaagcagt ggccttattg catcccaaac cacgcctctt
                                                                    1860
gaccaggctg cctcccttgt ggcagcaacg gcacagctaa ttctactcac agtgctttta
                                                                    1920
agtgaaaatg gtcgagaaag aggcaccggg aagccgtcct ggcgcctggc agtccgtggg
                                                                    1980
                                                                    2040
acgggatggt tctggctgtt tgagattctc aaaggagcga gcatgtcgtg gacacacaca
gactattttt agattttctt ttgccttttg caaccaggaa cagcaaatgc aaaaactctt
                                                                    2100
                                                                    2160
tgagagggta ggagggtggg aaggaaacaa ccatgtcatt tcagaagtta gtttgtatat
                                                                    2220
attataataa tottataatt gttotoagaa tooottaaca gttgtattta acagaaattg
tatattgtaa tttaaaataa ttatataact gtatttgaaa taagaattc
                                                                    2269
      956
640
DNA
Homo sapiens
^{<\!400>} 956 cgcgcgcccg aacgaagccg cggcccgggc acagccatgg cccggcgggc ggggggcgct
                                                                      60
eggatgtteg geageeteet getettegee etgetegetg eeggegtege eeegeteage
                                                                     120
                                                                     180
tgggatetee eggageeeeg eageegagee ageaagatee gagtgeacte gegaggeaae
                                                                     240
tggggacage tececacace teceetgagg gaccagegae tgeagetgag teatgatetg
                                                                     300
ctcggaatcc tcctgctaaa gaaggctctg ggcgtgagcc tcagccgccc cgcaccccaa
                                                                     360
atccagtaca ggaggctgct ggtacaaata ctgcagaaat gacaccaata ataggggcag
                                                                     420
acacaacage gtggcttaga ttgtgcccac ccagggaagg tgctgaatgg gaccctgttg
                                                                     480
                                                                     540
atggccccat ctggatgtaa atcctgagct caaatctctg ttactccatt actgtgattt
                                                                     600
ctggctgggt caccagaaat atcgctgatg cagacacaga ttatgttcct gctgtatttc
ctgcttccct gttgaattgg tgaataaaac cttgctcttt
                                                                     640
```

```
957
1011
DNA
Homo sapiens
<400> 957 ggtttatttt ccagatgcaa tcaatgcccc agtcacctgc tgttataact tcaccaatag
                                                                       60
gaagatetea gtgeagagge tegegageta tagaagaate accageagea agtgteecaa
                                                                      120
acaagctgtg atgtgagttc agcacaccaa ccttccctgg cctgaagttc ttccttgtgg
                                                                      180
                                                                      240
aqcaaqqqac aagcctcata aacctagagt cagagagtgc actatttaac ttaatgtaca
aaggttccca atgggaaaac tgaggcacca agggaaaaag tgaaccccaa catcactctc
                                                                      300
cacctgggtg cctattcaga acacccaatt tctttagctt gaagtcagga tggctccacc
                                                                      360
                                                                       420
tggacaccta taggagcagt ttgccctggg ttccctcctt ccacctgcgt tcctcctcta
qctcccatgg cagccctttg gtgcagaatg ggctgcactt ctagaccaaa actgcaaagg
                                                                       480
aacttcatct aactctgtcc tccctcccca cagcttacag accattgtgg caaggagatc
                                                                       540
tgtgctgacc ccaagcagaa gtgggttcag gattccatgg accacctgga caagcaaacc
                                                                       600
                                                                       660
caaactccqa aqacttgaac actcactcca caacccaaga atctgcagct aacttatttt
tccctagctt tccccagaca ccttgtttat tttattataa tgaattttgt ttgttgatgt
                                                                       720
gaaacattat gccttaagta atgttaattc ttatttaagt tattgatgtt ttaagtttat
                                                                       780
                                                                       840
ctttcatggt actagtgttt tttagataca gagacttggg gaaattgctt ttcctcttga
                                                                       900
accacaqttc tacccctggg atgttttgag ggtctttgca agaatcatta atacaaagaa
ttttttttaa cattccaatg cattgctaaa atattattgt ggaaatgaat attttgtaac
                                                                       960
                                                                      1011
958
1031
DNA
Homo sapiens
<400> 958 gtctgccct gcccttgcag atggccaagc tgcggagcct cctctccagt gctgagaacg
                                                                        60
agcccccagt gcctcttgtg agcaactggc gacctccaca gcctatcaat aacagggtgg
                                                                       120
                                                                       180
tgagagette etteaaatga ggetgetgga tettgeeete tteaggaaag gaaacetace
attggagagc ttggttcctt gcctccttct ggtgctctta ctccaagtct atttcatttt
                                                                       240
tccacactga gcaatgaatg tgagagatgt ggtcaccaag atctaagtta cttgttgaaa
                                                                       300
gaaagttact ttcgacaaga tctaatatga aagcatagat ttcacatttg atctctgtaa
                                                                       360
                                                                       420
taatcatctt tcctataaaa gtagcatttt tggtaaagtt tcaaagaaga agaaacagag
atggaagagt aaagatattt ttaaaatggc tagctattgg gcaccagttt ttctgttatc
                                                                       480
taaaatttca cacaacttca tgtttttatt tttatattat gagttgtcca tcttaaagaa
                                                                       540
                                                                       600
atatgagtaa ttctacatgt agtagaggtg tatgaagatc atataacaat taaacataag
ccagaaatta aaatgactat agacagcaag aattgagcta ataatatgtt ttaactctta
                                                                       660
acaccagcaa gaagtcagtc atttattgaa gttttagcta ctaagattac ttggttttga
                                                                       720
ttaccagtga aaagaaaaca caatacaatc aggagttttc aaatttttga ttcagtattt
                                                                       780
                                                                       840
gaatttcttc ttcataaatg tagttggaat ttatcctagt atttttcttt acctgaagga
gggccattta tttttaattt cactacattt ttctttgcat gattattaaa ataaaaactg
                                                                       900
cctctgttgt gtttctcact ggaggctgga atgaatgatc actagaacac aaaagagtga
                                                                       960
atgatgacac ttgaagtcaa agcagttgta ctgatcacca gaaccaataa agacataaat
                                                                      1020
                                                                      1031
ggaaaacgtt g
       959
2689
DNA
Homo sapiens
<400> 959
ggctggggcc tgaggcctgg ggctcaccca cgcccccgcc gacgcctgcc gcgccgccgc
                                                                        60
cacccccgcc acccggagcc ccgggtggct cgcaggacac ctgtacgtcg tgcggcggct
                                                                       120
```

```
tccggcggcc agaggagctc ggccgagtgg acggcgactt cctggaggcg gtgaagcggc
                                                                    180
                                                                    240
acatettgag eegeetgeag atgeggggee ggeecaacat caegeaegee gtgeetaagg
                                                                    300
ccgccatggt cacggccctg cgcaagctgc acgcgggcaa ggtgcgcgag gacggccgcg
tggagatccc gcacctcgac ggccacgcca gcccgggcgc cgacggccag gagcgcgttt
                                                                    360
420
tcttcatctc caacgaaggc aaccagaacc tgtttgtggt ccaggccagc ctgtggcttt
                                                                    480
acctgaaact cctgccctac gtcctggaga agggcagccg gcggaaggtg cgggtcaaag
                                                                     540
                                                                     600
tgtacttcca ggagcagggc cacggtgaca ggtggaacat ggtggagaag agggtggacc
                                                                     660
tcaagcgcag cggctggcat accttcccac tcacggaggc catccaggcc ttgtttgagc
ggggcgagcg gcgactcaac ctagacgtgc agtgtgacag ctgccaggag ctggccgtgg
                                                                     720
tgccggtgtt cgtggaccca ggcgaagagt cgcaccgacc ctttgtggtg gtgcaggctc
                                                                     780
                                                                     840
qqctqqqcqa caqcaggcac cgcattcgca agcgaggcct ggagtgcgat ggccggacca
acctctgttg caggcaacag ttcttcattg acttccgcct catcggctgg aacgactgga
                                                                     900
                                                                     960
tcatagcacc caccggctac tacggcaact actgtgaggg cagctgccca gcctacctgg
caggggtccc cggctctgcc tcctccttcc acacggctgt ggtgaaccag taccgcatgc
                                                                    1020
                                                                    1080
ggggtctgaa ccccggcacg gtgaactcct gctgcattcc caccaagctg agcaccatgt
ccatgctgta cttcgatgat gagtacaaca tcgtcaagcg ggacgtgccc aacatgattg
                                                                    1140
tggaggagtg cggctgcgcc tgacagtgca aggcaggggc acggtggtgg ggcacggagg
                                                                    1200
                                                                    1260
qcaqtcccgg gtgggcttct tccagccccc cgcgggaacg gggtacacgg tgggctgagt
acagtcattc tgttgggctg tggagatagt gccagggtgc ggcctgagat atttttctac
                                                                    1320
agcttcatag agcaaccagt caaaaccaga gcgagaaccc tcaactgaca tgaaatactt
                                                                    1380
                                                                    1440
taaaatgcac acgtagccac gcacagccag acgcatectg ccacccacac agcagcctcc
                                                                    1500
aggataccag caaatggatg cggtgacaaa tggcagctta gctacaaatg cctgtcagtc
ggagagaatg gggtgagcag ccaccattcc accagctggc ccggccacgt ctcgaagttg
                                                                    1560
cgccttcccg agcacacata aaagcacaaa gacagagacg cagagagaga gagagagcca
                                                                    1620
cggagaggaa aagcagatgc aggggtgggg agcgcagctc ggcggaggct gcgtgtgccc
                                                                    1680
                                                                    1740
egtggetttt accaggeetg etetgeetgg etegatgtet gettetteec ageetgggat
ccttcgtgct tcaaggcctg gggagcctgt ccttccatgc ccttgtcgag ggaaagagac
                                                                    1800
ccagaaagga cacaacccgt cagagacctg ggagcagggg caatgaccgt ttgactgttt
                                                                    1860
gtggcttggg cctctgacat gacttatgtg tgtgtgtt tttggggtgg ggagggaggg
                                                                    1920
agagaagagg gggctaaatt tgatgcttta actgatctcc aacagttgac aggtcatcct
                                                                    1980
                                                                    2040
tgccagttgt ataactgaaa aaggactttt ctaccaggta tgacctttta agtgaaaatc
                                                                    2100
tgaattgttc taaatggaaa gaaaaaaagt tgcaatctgt gcccttcatt ggggacattc
                                                                    2160
ctctaggact ggtttgggga cgggtgggaa tgacccctag gcaaggggat gagaccgcag
gaggaaatgg cggggaggtg gcattcttga actgctgagg atggggggtg tcccctcagc
                                                                    2220
                                                                    2280
ggaggccaag ggaggggagc agcctagttg gtcttggaga gatggggaag gctttcagct
gatttgcaga agttgcccat gtgggcccaa ccatcagggc tggccgtgga cgtggcccct
                                                                    2340
                                                                    2400
gcccactcac ctgcccgcct gcccgcccgc ccgcatagca cttgcagacc tgcctgaacg
                                                                    2460
cacatgacat agcacttgcc gatctgcgtg tgcccagaag tggcccttgg ccgagcgccg
aactcqctcq ccctctagat gtccaagtgc cacgtgaact atgcaattta aagggttgac
                                                                    2520
ccacactaga cgaaactgga ctcgtacgac tctttttata ttttttatac ttgaaatgaa
                                                                    2580
atcctttgct tcttttttaa gcgaatgatt gcttttaatg tttgcactga tttagttgca
                                                                    2640
                                                                    2689
tgattagtca gaaactgcca tttgaaaaaa aagttatttt tatagcagc
       960
2875
DNA
Homo sapiens
```

gaatteteeg gagetgaaaa aggateetga etgaaageta gaggeattga ggageetgaa

gattctcagg	ttttaaagac	gctagagtgc	caaagaagac	tttgaagtgt	gaaaacattt	120
cctgtaattg	aaaccaaaat	gtcatttata	gatccttacc	agcacattat	agtggagcac	180
	acaagtttac					240
tttggtgaca	tgcttgatac	tccagatccc	tatgtggaac	tttttatctc	tacaacccct	300
gacagcagga	agagaacaag	acatttcaat	aatgacataa	accctgtgtg	gaatgagacc	360
tttgaattta	ttttggatcc	taatcaggaa	aatgttttgg	agattacgtt	aatggatgcc	420
aattatgtca	tggatgaaac	tctagggaca	gcaacattta	ctgtatcttc	tatgaaggtg	480
ggagaaaaga	aagaagttcc	ttttatttc	aaccaagtca	ctgaaatggt	tctagaaatg	540
tctcttgaag	tttgctcatg	cccagaccta	cgatttagta	tggctctgtg	tgatcaggag	600
aagactttca	gacaacagag	aaaagaacac	ataagggaga	gcatgaagaa	actcttgggt	660
ccaaagaata	gtgaaggatt	gcattctgca	cgtgatgtgc	ctgtggtagc	catattgggt	720
tcaggtgggg	gtttccgagc	catggtggga	ttctctggtg	tgatgaaggc	attatacgaa	780
tcaggaattc	tggattgtgc	tacctacgtt	gctggtcttt	ctggctccac	ctggtatatg	840
tcaaccttgt	attctcaccc	tgattttcca	gagaaagggc	cagaggagat	taatgaagaa	900
ctaatgaaaa	atgttagcca	caatcccctt	ttacttctca	caccacagaa	agttaaaaga	960
	ctttatggaa					1020
	taataggaga					1080
	aagttaatac					1140
	tttcagagct					1200
	aatatggtac					1260
	ttaagaagta					1320
	ccatattgtt					1380
	aggaagaatt					1440
	atgatgaatc					1500
	gtgataatca					1560
	tattcaatac					1620
	tcaatacatc					1680
	atgatgaact					1740
tatgagcctc	tggatgtcaa	aagtaaaaag	attcatgtag	tggacagtgg	gctcacattt	1800
aacctgccgt	atcccttgat	actgagacct	cagagagggg	ttgatctcat	aatctccttt	1860
gacttttctg	caaggccaag	tgactctagt	cctccgttca	aggaacttct	acttgcagaa	1920
aagtgggcta	aaatgaacaa	gctccccttt	ccaaagattg	atccttatgt	gtttgatcgg	1980
gaagggctga	aggagtgcta	tgtctttaaa	cccaagaatc	ctgatatgga	gaaagattgc	2040
	tccactttgt					2100
gttccaaggg	aaactgagga	agagaaagaa	atcgctgact	ttgatatttt	tgatgaccca	2160
gaatcaccat	tttcaacctt	caattttcaa	tatccaaatc	aagcattcaa	aagactacat	2220
gatcttatgc	acttcaatac	tctgaacaac	attgatgtga	taaaagaagc	catggttgaa	2280
agcattgaat	atagaagaca	gaatccatct	cgttgctctg	tttcccttag	taatgttgag	2340
gcaagaagat	ttttcaacaa	ggagtttcta	agtaaaccca	aagcatagtt	catgtactgg	2400
aaatggcagc	agtttctgat	gctgaggcag	tttgcaatcc	catgacaact	ggatttaaaa	2460
gtacagtaca	gatagtcgta	ctgatcatga	gagactggct	gatactcaaa	gttgcagtta	2520
cttagctgca	tgagaataat	actattataa	gttaggtgac	aaatgatgtt	gattatgtaa	2580
ggatatactt	agctacattt	tcagtcagta	tgaacttcct	gatacaaatg	tagggatata	2640
tactgtattt	ttaaacattt	ctcaccaact	ttcttatgtg	tgttctttt	aaaaattttt	2700
	aatatttaac					2760
_					tatatgcata	2820
tatatacata	catgaaataa	atacatcaat	ataaaaataa	aaaaaaacgg	aattc	2875

961 2542 DNA Homo sapiens <400> 961 actccaggtg gtagtgctcg ctctggcgca gattagaggt ccaccgggag agcggggccc 60 cccgggtccc ccgggaccgc cgggagtgcc tggatccgac ggcatcgacg gtgacaatgg 120 180 gcccctgga aaagctggcc ctccgggacc caagggcgag cctggcaaag ctgggccaga 240 tgggccagac gggaagcccg ggattgatgg tttaactgga gccaaggggg agcctggccc catggggatc cctggagtca agggccagcc cgggcttcct ggtcctcctg gccttccggg 300 360 ccctggtttt gctggacctc ctgggcctcc tggacctgtt ggcctccctg gtgagattgg 420 aatccgaggc cccaaggggg accctggacc agatggacca tcggggcccc caggaccccc tgggaaacct ggtcgcccgg gaaccatcca gggtctggaa ggcagtgcgg atttcctgtg 480 540 tccaaccaac tgtccacccg gaatgaaagg tcccccaggg ctgcagggag tgaaggggca tgcgggcaaa cgcgggattc tgggtgatcc tggccaccag gggaagccgg gtcccaaggg 600 660 agatgtgggt gcctctggag agcaaggcat ccctggacca ccgggtcccc agggcatcag 720 gggctaccca ggcatggcag ggcccaaggg agagacgggc cctcatggat ataaaggcat 780 ggtgggggt atcggtgca ctgggccacc gggtgaggaa ggtcctaggg gaccgccagg ccgagctggg gagaagggtg acgagggcag cccaggtatt cgtggacccc aggggatcac 840 900 aggcccgaaa ggagcaacgg gccccccagg catcaacggc aaggatggga ccccaggcac 960 gcctggcatg aagggcagtg caggacaggc gggacagccc ggaagtccag gccaccaggg 1020 cctagcgggt gtgccaggcc agcctgggac aaaaggaggc cctggagacc agggtgagcc 1080 qqqcccqcaq ggccttcctq gattctctqq tccccctqqq aaaqaqqqaq agccaqqqcc 1140 tcgaggagaa attggtcccc agggcatcat gggacagaag ggtgaccaag gcgagagggg 1200 tccaqtqqqq caaccaggcc ctcagggaag gcagggccct aagggggagc agggcccccc cggaattcca gggccccaag gcttgccagg cgtcaaagga gacaagggct ccccagggaa 1260 1320 gaccgggccc cgcggcaaag tgggtgaccc aggggtggcc ggcctccccg gagagaaagg cgagaagggc gagtccggcg agccggggcc caagggacag caaggagtac gtggagaacc 1380 cggctaccct gggcccagcg gggatgcggg cgccccaggg gttcagggct accctggtcc 1440 1500 ccccggccct cgaggactgg ccgggaaccg aggcgtgcca ggacagcccg ggagacaggg cgtggagggc cgggatgcca ctgaccagca catcgtggat gtggcgctga agatgctgca 1560 agagcaactg gcagaggtcg ccgtgagtgc caagcgggaa gccctgggtg cggtgggcat 1620 gatgggtcct ccaggacctc ctgggccccc tgggtaccca ggcaagcagg gcccccatgg 1680 1740 gcaccetgge ceteggggeg tteetggeat egtgggagee gtgggteaga teggeaacae qqqqcccaaq qgaaaacqtg gagagaaggg tgatccagga gaagtgggac gggggcaccc 1800 cgggatgcct gggcccccag ggatcccagg acttcctggc cggcctggcc aggcaatcaa 1860 cggcaaggat ggagatcgag ggtccccagg ggctccagga gaggcaggtc gacctggcct 1920 1980 gccaggcccc gtggggctgc cgggcttctg tgaacctgcc gcctgccttg gagcttcggc ctatgcctct gcccgcctta cagagcctgg atccatcaag gggccttgag catcaggccc 2040 2100 agacagagcc tggcaggcat cctggcggga aggaccaggt cccctctggt ggacatgcac ccatccccag tccaggaaac catctccccc aggaccttct gtctgggact caggagtcct 2160 2220 aaggaaaagg aattetaaaa catgggggaa ggggaggtag agcactgatg ggtgaaaaag 2280 tqaqqccaac acacagggca agtggtgtcg atggagtcga agcgctgaag gaatagggcg gctttccttc cagcgagcat cattcggctg ttaccaaaac aaacatctta atctgcacct 2340 2400 tectecactg gecatettgt cettgggtea gtgggacatg ggcacetegg gaggeeeggg 2460 ccctgcccag ctacagttcc accctcagc ttgaggacca atactgaggt ctatgccagt tcctgatccc atctcactct ctggacctac taggtgactg ctgctggggt gactcccctg 2520 2542 aggeggetat accettaage ca

<210> 962 <211> 450

<212> DNA <213> Homo sapiens	
<400> 962	
gtgactgtga ggactgtgga taacctgctg gaggtgtctg cccggcaccc ccagcgcctg	60
gaccgccacg gcttcgtgtc ccgagagttc tgccgcacct atgtcctgcc tgctgatgtc	120
gacccctggc gagtccgagc tgctctctcc catgatggca tcttaaacct ggaagcacct	180
cggggtggcc gacatttgga cacagaggtc aatgaggtct acatctccct gctccctgcg	240
cctcctgatc cagaggaaga ggaggaggca gccatagttg agccctgatt gccacagacc	300
cagcacccag caaatccctc tctacctccc aaggtgatat ggccagctgc ccaccactcc	360
agaggtagca gcatccttgg gggaagggaa aggtgcatgg tccacaatgt atggtttggt	420
cccatgggac atgtcatagc cttggtttag	450
<210> 963 <211> 1435 <212> DNA <213> Homo sapiens	
<400> 963 ttgtaacaga aaattaaaat atactccact caagggaatt ctgtactttg cccttttggt	60
aaagteteat ttacatttet aaacetttet taagaaaate gaattteett tgatetetet	120
totgaattgc agaaatcaga taaaaactac ttggtgaaat gacttottgt cacattgctg	180
aagaacatat acaaaaggtt gctatctttg gaggaaccca tgggaatgag ctaaccggag	240
tatttctggt taagcattgg ctagagaatg gcgctgagat tcagagaaca gggctggagg	300
taaaaccatt tattactaac cccagagcag tgaagaagtg taccagatat attgactgtg	360
acctgaatcg catttttgac cttgaaaatc ttggcaaaaa aatgtcagaa gatttgccat	420
atgaagtgag aagggctcaa gaaataaatc atttatttgg tccaaaagac agtgaagatt	480
cctatgacat tatttttgac cttcacaaca ccacctctaa catggggtgc actcttattc	540
ttgaggattc caggaataac tttttaattc agatgtttca ttacattaag acttctctgg	600
ctccactacc ctgctacgtt tatctgattg agcatccttc cctcaaatat gcgaccactc	660
gttccatagc caagtatect gtgggtatag aagttggtcc tcagcctcaa ggggttctga	720
gagctgatat cttggatcaa atgagaaaaa tgattaaaca tgctcttgat tttatacatc	780
atttcaatga aggaaaagaa tttcctccct gcgccattga ggtctataaa attatagaga	840
aagttgatta cccccgggat gaaaatggag aaattgctgc tatcatccat cctaatctgc	900
aggatcaaga ctggaaacca ctgcatcctg gggatcccat gtttttaact cttgatggga	960
agacgatccc actgggcgga gactgtaccg tgtaccccgt gtttgtgaat gaggccgcat	1020
attacgaaaa gaaagaagct tttgcaaaga caactaaact aacgctcaat gcaaaaagta	1080
ttcgctgctg tttacattag aaatcacttc cagcttacat cttacacggt gtcttacaaa	1140
ttctgctagt ctgtaagctc cttaagagta gggttgtgcc ttattcaact gcatacatag	1200
ctcctagcac agtgccttat tcggtaggca tctaagcaaa tttcttaaat taattaatat	1260
atctttaaag atatcatatt ttatgtatgt agcttattca aagaagtgtt tcctatttct	1320
atatagttta ttatacatga tacttgggta gctcaacatt cttaataaac agcctttgta	1380
ttcagaatat aaaattgaaa tagatatata taaagttaaa aaaaaaaa	1435
<210> 964 <211> 2330 <212> DNA <213> Homo sapiens	
<400> 964 aaaggaccga ggcgtgcagc ggacagcaga tggatcccgc ggccagcagc tgcatgagga	60
gcctccagcc cccagcccct gtctggggct gccttcgaaa cccccactcg gaaggcaatg	120
gggcctcagg gctaccccac tacccgccca ccccgttctc cttccaccag aaaccagact	180
tectggegae agegaeggea gegtaecetg aetteteage etcetgeetg geagecaece	240
cacacagect geoceaggag gageaeatet teaetgagea geaeceeget tteecacagt	300
cccccaactg gcacttecct gtctcagacg cccggcgcag gcccaactca ggcccggcag	360
ggggttccaa ggaaatgggg accagcagcc tgggcctggt ggacaccaca ggaggcccag	420

```
480
gcgatgacta cggggtgctt gggagcactg ccaatgagac agagaagaaa tcatccaggc
ggagaaagga gagttcagac aaccaggaga acagagggaa gccggagggc agcagcaaag
                                                                     540
                                                                     600
cccqcaagga gaggacggcc ttcaccaagg agcagctgcg agagctggag gcagagtttg
                                                                     660
cccatcataa ctacctgact cggctccgca gatatgagat tgcggtaaac ctggacctct
                                                                     720
ctgagcgcca ggtcaaagtg tggttccaga accgaaggat gaagtggaag cgtgtgaagg
gaggtcagcc catctccccc aatgggcagg accctgagga tggggactcc acagcctctc
                                                                     780
                                                                     840
caagttcaga gtgagattct gcatggagga aaaatgacta aggactgagc cccctaccca
                                                                     900
acatctttcc ctgactcttg gatatgaaac tgcccagcat tcctgggagt cttaggattt
                                                                     960
                                                                    1020
tctaggaagt tctgtccagc ctcttagcag cctcttccct agggcctttg ctcccacact
ctcatggaat cagacagaga tcctaccggg ccggatgaat ctggaaacag cttcagagat
                                                                    1080
                                                                    1140
actycttctc agcgtctctt ggctgccacc catgcctcct cctaccgctg ttctcctagg
                                                                    1200
tcagccaggc ctcctcctgg tctggacacc acctggcctg gtgggagagg agctttggaa
                                                                    1260
ccagctggcg actcggaaag taaatgcttc aaaaggaagg aaatgacaga gacacacgcc
cttgcccacc ttcctctgta ggctgcacat ctgaggcttt ggggcccctt agttgtcccg
                                                                    1320
                                                                    1380
aaaccccaag aaaaatcaga atgaggagag tcaaggacag caactcagct gctgcaagcc
agaaacacat ccctgtctcc aaatttgttg gctaagtgga gacacttctg agaactgact
                                                                    1440
                                                                    1500
agagaagaca agaaaatagc ccgatgtagg tttcggtgtc cccatatagg ccccgtccac
acaggettga etgggtggac aagaatgaac ecatgacage acetgetget teaaaatcaa
                                                                    1560
                                                                    1620
aatcaattta gggatacagc aggggctgtt gggctgtgct ccagagaaaa ggagcagcta
                                                                    1680
ctccttttaa atccacgatt tctggattga aaacctgtcc agatgctgag ttgttgggct
gaacaactag gagctgaaaa caacgtagag gctggaaagt gtcccctgca ttctggaggg
                                                                    1740
                                                                    1800
gaggggagat aataaggagg gctgctgggt gagggcctgg agatgtggaa ccctggagtg
gaaggtttct ccagtgacag tgtcctgtga cwgcaaaagg grasaagaaa atccctcttc
                                                                    1860
                                                                    1920
ctccatggga tggatttaag ctcttgctgt gtgttctaca aatgctgtta ttgtgggagg
                                                                    1980
aaatgctagg tttttgtgtg tggactgccc agacctcagc caggtcttct ggagatgaca
tttgaggact gatggccaaa gagcatgggg gactgaagcc ctggctgcct cagcgctctg
                                                                    2040
                                                                    2100
tctcccaaca ccagctggtg ttgcagaggg aggtcaacgt gagtttggat ctcttgtacg
cagatgtaat cattcacatg taaaaataac cccacctccc caccccaaaa agggcaagag
                                                                    2160
ctgtggaaaa tgattgccaa atgagatggc tggttagagc atgatttttt ctaaagcata
                                                                    2220
                                                                    2280
cttcatatat tttcttaaga ttacatcaag ctaattgtgc gagctcaatt cactttgtaa
gaaaactctc ggagaaataa aatcaataaa aagccaaaaa aaaaaataag
                                                                    2330
       965
1358
DNA
Homo sapiens
<400> 965 cctgccctgg aagcggatcg aagtgatggc cctgcccaaa ccgggcgggg cccacagcct
                                                                      60
agccctggtg acagtgccca gcatgggcta tgctcctgtt cctcccccca cctcactgca
                                                                     120
gcccctgctg ccccagcagc ctgtgttcgt agtgcaagag actgatggct ccgtgactct
                                                                     180
qqacaatqqc atcatccgag tgaagctgga cccaactggt cgcctgacgt ccttggtcct
                                                                     240
                                                                     300
qqtqqcctct ggcagggagg ccattgctga gggcgccgtg gggaaccagt ttgtgctatt
tgatgatgtc cccttgtact gggatgcatg ggacgtcatg gactaccacc tggagacacg
                                                                     360
                                                                     420
gaageetgtg etgggeeagg eagggaeeet ggeagtggge accgagggeg geetgegggg
cagcgcctgg ttcttgctac agatcagccc caacagtcgg cttagccagg aggttgtgct
                                                                     480
                                                                     540
qqacqttqqc tgcccctatg tccgcttcca caccgaggta cactggcatg aggcccacaa
                                                                     600
gttcctgaag gtggagttcc ctgctcgcgt gcggagttcc caggccacct atgagatcca
                                                                     660
qtttqqqcac ctgcagcgac ctacccacta caatacctct tgggactggg ctcgatttga
                                                                     720
ggtgtgggcc catcgctgga tggatctgtc agaacacggc tttgggctgg ccctgctcaa
```

cgactgcaag tatggcgcg	t cagtgcgagg	cagcatcctc	agcctctcgc	tcttgcgggc	780
gcctaaagcc ccggacgct					840
gccgcacaag ggctctttc					900
cccctgttg gctctgcca					960
cgtgtcttca cccgcggtc					1020
ccgctcgctg gtcctgagg					1080
cttgtcgctg ccggttcag					1140
tggccacttg acttcggga					1200
ccctgttgct cgtgcttca					1260
tagaaggctc tggggactc					1320
tcttgtggaa taaatcctt					1358
-					
<pre>&lt;210&gt; 966 &lt;211&gt; 1303 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 966 ctgccaatga gctccgccg	ga gtagcaccgg	ggcagggcta	gcgcttaaag	gagccgcgac	60
ccctttgcag accagaggg					120
ttgtggctac taatgccac					180
ggtgagttca cgttcctgt					240
gccaacgcaa gcctcgaga					300
ttcacgctgg agagcccto					360
gtacacacgg tggagcca					420
agcaccatct ccgagaag					480
gaggaggtcg aaggatgg					540
gaggacatca aggagtcca					600
ctcacgctac tgcgggcc					660
cgggtcaact tctggtca	gc tgtcaacgtg	geggtgetge	tgctggtggc	tgtgctgcag	720
gtctgcacgc tcaagcgc					780
tggaaggaag aacgggac					840
ccctccccaa ttttagtt	tc ctgccaaaac	gggagtgtgc	agtcagggcc	tgcggtctgg	900
ccccatgagt ctccttcc	gt cctcagcggg	cagggaacac	ctctggcttg	tagaagggac	960
ggctcagtgg ctgcaccg	ac ggtcctggaa	atctcacatg	gtgggcactg	cagcgttgga	1020
acgtgagcct cggatttc					1080
tcctgtgtta gcgttgcc	tg gtgcggggca	. gggcctaaca	aggaaacctg	ggccctccaa	1140
gccaggttga ggtctggt					1200
gcccctctcc tgcagggg	cc ccacacaggo	atgagggatg	gcccggccaa	agtctaggca	1260
gaagcctcct ataacaaa	gg gtggtgtggc	ctgggcattg	gag		1303
<210> 967 <211> 1539 <212> DNA <213> Homo sapiens					
<400> 967 gtgaagggag ccgggatc	ag ccaggggcca	gcatgagccg	gagggaggga	agtctggaag	60
accccagac tgattcct					120
cacacageet tgegeace					180
agctccaggg agacccct					240
gcctgagcgc cccggctc					300
acgcggcggc gctggccg					360
agctgaaccc gcgcgcgc					420

```
gggccctggg cgccgccgtg gaggccttgc tggccgcgct gggcgccgcc aaccgcgggc
                                                                     480
ceegggeega geeceegge geeacegeet cageegeete egecaceggg gtetteeeeg
                                                                     540
                                                                     600
ccaaggtgct ggggctccgc gtttgcggcc tctaccgcga gtggctgagc cgcaccgagg
gegacetggg ccagetgetg cceggggget eggeetgage geegegggge agetegeeee
                                                                     660
gestestes getgggttes gtstetestt esgettettt gtstttetet gesgetgteg
                                                                     720
gtgtctgtct gtctgctctt agctgtctcc attgcctcgg ccttctttgc tttttgtggg
                                                                     780
ggagaggga ggggacgggc agggtctctg tcgcccaggc tggggtgcag tggcgcgatc
                                                                     840
                                                                     900
ccagcactgc agcctcaacc tcctgggctc aagccatcct tccgcctcag cttccccagc
agctgggact acaggcacgc gccaccacag ccggctaatt ttttatttaa ttttttgtag
                                                                     960
                                                                    1020
agacgaggtt tcgccatgtt gcccaggctg gtcttgaact ccggggctca agcgatcctc
ccgcttcagc ctccctaagt gctgggattg caggcgtgag ccactttccc agcctctctt
                                                                    1080
tgctttgcct gccccgttct cttaactctt ggaccctcct cgtctgcatg gtaactccgt
                                                                    1140
ctgagtctac cattttcttg ctctccctcc ttccttgggc ctgcctcagt tccctttggc
                                                                     1200
ctccccttt acccagctct tggggtgtct ctgttttttc catccccact tcctgccttc
                                                                     1260
                                                                     1320
tegtggeeet gtgtgageae atgtgtaeat eteageetta teteaaggag gtgaeaeett
ctctccttgt ccccatctgg ccgtctctct gtgcttccct ggccaggggc gtgcctgctg
                                                                     1380
gtcctatggg gggaaggcta ctccgcatct cagccacctt cctcaggctc actccaccta
                                                                     1440
catececagt etgecacace ecatecettt gggeeteage eetgteeett tgatgteete
                                                                     1500
                                                                     1539
ctttccttca gcccctctgc cctgtccctg cacacctcc
<210><211><211><212><213>
       968
1443
DNA
Homo sapiens
<400> 968 ctgcggtcag cgcacgtgcc cgcgagacct gcaaacttgt gccaccggct ctgcccgtcc
                                                                       60
ccggggagcc cgaacgcccc gcagccctca cccctcccgc cagtctccag ccatgggctg
                                                                      120
                                                                      180
ctttgaatgc tgcatcaagt gtctgggagg agtcccctac gcctccctgg tggccaccat
cctctgcttc tccggggtgg ccttattctg cggctgtggg catgtggctc tcgcaggcac
                                                                      240
cgtggcgatt cttgagcaac acttctccac caacgccagt gaccatgcct tgctgagcga
                                                                      300
                                                                      360
ggtgatacaa ctgatgcagt atgtcatcta tggaattgcg tcctttttct tcttgtatgg
                                                                      420
gatcattctg ttggcagaag gcttttacac cacaagtgca gtgaaagaac tgcacggtga
gtttaaaaca accgcttgtg gccgatgcat cagtggaatg ttcgttttcc tcacctatgt
                                                                      480
gcttggagtg gcctggctgg gtgtgtttgg tttctcagcg gtgcccgtgt ttatgttcta
                                                                      540
caacatatgg tcaacttgtg aagtcatcaa gtcaccgcag accaacggga ccacgggtgt
                                                                      600
ggagcagatc tgtgtggata tccgacaata cggtatcatt ccttggaatg ctttccccgg
                                                                      660
                                                                      720
aaaaatatgt ggctctgccc tggagaacat ctgcaacaca aacgagttct acatgtccta
tcacctgttc attgtggcct gtgcaggagc tggtgccacc gtcattgccc tgctgatcta
                                                                      780
                                                                      840
catgatggct actacatata actatgcggt tttgaagttt aagagtcggg aagattgctg
cactaaattc taaattgcat aaggagtttt agagagctat gctctgtagc atgaaatatc
                                                                      900
                                                                      960
actgacactc cagactaaag cagagtctag gtttctgcaa ttttgttaca gtaatttgta
                                                                     1020
aatagcttta gtaaactcac cttgcatggt agattaataa gatgacttac tgtacatgaa
                                                                     1080
ttacacaata atgagatctg gtggctattt ccacattttg aaaaggattc agttatttac
 tgacagtggt gagcatcctt tttaaaaataa tgttctgata cttaaacatt agagagcagt
                                                                     1140
 atctttaaat gaattattaa cactttggaa tacttacatt ttctgttatt tttgattgcc
                                                                     1200
 tgataaccag tttcaatgat gaaaatgaaa acaagtgctg aagatgaaat ggaagagaac
                                                                     1260
 cgttttaatc tggattttgt tttgtcacac ctggaaaata ctttgcaaat atgttctaaa
                                                                     1320
                                                                     1380
 ttgaaaacaa tttttttatg atcacatggt tcactaccaa atgaccctca aataagccag
 1440
                                                                     1443
 aaa
```

```
969
1551
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 969 ctcttcagc cttctgcaat ctagttctac ttagtcacac acttctctaa gaccactcat
                                                                      60
acgtaaacac tacgtagagg cccctttttg cctcatttta cattgtttag ttatcatttt
                                                                     120
gaaacttttc ttcacatatg taacagtgcc ggagtttttc tgcttctctg tgtttgttca
                                                                      180
gtaactcttc tttaggatac acctaaagat gagaagcttc atacccagta ctcctcttca
                                                                      240
ttcactcata tgtttttggg atcagtccct tctgctggct gtgcattggt ctaatggaac
                                                                      300
agaatagagt ccagaaataa cccaacatgt atgtggacaa ctggtttttg acagaggtgc
                                                                      360
aaaggtettg aaaaaatgat getggaataa ttgggeatea gatgeaaaat taaaaacaaa
                                                                      420
ttggtccata tcttaacact ggcaaagatt aaagtccaaa tggattatag ttccccaaaa
                                                                      480
                                                                      540
ctgtataatt tctagaagac aacaaggaaa acgtgttcag ccttgggtta ggaaaagatt
tcttaaatcc aacaccaaaa gcacaatcca tgaaggaaaa atcgataaat tgtacttnat
                                                                      600
                                                                      660
caaaattgag aacttctctt tgaaaggtac cataaggaga acaaaaagac aagctgtaga
gtggcagaaa aatatttgna aaacatttct gataaatgag tcgcatctag attacataaa
                                                                      720
gaagteteaa aactgaacaa agtaaaacee attgttgaet taatgegetg ttteeteetg
                                                                      780
agettgetge etetgeeect getetetete etttteeatt tgtttteaac attgaateea
                                                                      840
                                                                      900
gaatgttett ettgagatee aagteagate acaceaacee teagaactet ecaatagaeg
                                                                      960
accatggcac tcaaaagtcc acaatagcct tcaatgctgg gcaaaacatg aagcacccct
                                                                     1020
tttctccctt ctctgacccc atcacctctg tgttcaccct gctcctgccg tcctccctgc
ctccaaaaca ggtcaggcct tcgtgccttt gcacttacta tttgcaatac cccaaatgtt
                                                                     1080
                                                                     1140
cttcaggctc tttagcctct tcatttcttt tcctgaagtg tcatctcact gaggcttatc
taaagctgca gctactgggg cattcctgtc tcatctccct gctgtatttt gtactcccgg
                                                                     1200
ctctcttttg tacttttaaa catacctata tggtttacct ttgttgttta tatttgcatg
                                                                     1260
1320
tattcccaga acaattccct ggcaaatatt tggtactcaa tagtaatgct aagttagtaa
                                                                     1380
ataaatgatg aatttagaat caaaataacg tgtctatggc caaaataaaa cctgaaatcc
                                                                     1440
                                                                     1500
ctgtcctatt tcccagaggt aactgctgtt aatagtttag ttgtgtgctt ccagacatac
                                                                     1551
cttcacagaa tcatttatca caataaaggt gtcatactat gcaaaaaaaa a
       970
853
DNA
Homo sapiens
                                                                       60
agtggcaccg ctgactgccg agaggaaget cgcctctgcc cggctgccct cttgtagtcc
                                                                      120
gccggcgagg ggcagttctc ggtgaggagg aagagagcag cggacggcac agcacccgcg
                                                                      180
cgggccctcc cacaacagct ccagctggca gcatcacttc ccgccaattt atccaacttc
                                                                      240
 tgccaaggct ctgaaatgcc aacaacgtcg aggcctgcac ttgatgtcaa gggtggcacc
 tcacctgcga aggaggatgc caaccaagag atgagctccg tggcctactc caaccttgcg
                                                                      300
                                                                      360
gtgaaagatc gcaaagcagt ggccattctg cactaccctg gggtagcctc aaatggaacc
aaggccagtg gggctcccac tagttcctcg ggatctccaa taggctctcc tacaaccacc
                                                                      420
 cctcccacta aacccccatc cttcaacctg caccccgccc ctcacttgct ggctagtatg
                                                                      480
                                                                      540
 cagctgcaga aacttaatag ccagtatcag gggatggctg ctgccactcc aggccaaccc
                                                                      600
 ggggaggcag gacccctgca aaactgggac tttggggccc aggcgggagg ggcagaatca
                                                                      660
 ctctctcctt ctgctggtgc ccagagccct gctatcatcg attcggaccc agtggatgag
                                                                      720
 gaagtgctga tgtcgctggt ggtggaactg gggttggacc gagccaatga gcttccggag
```

ctgtggctgg ggcagaatga gtt					780
caagtgtccc taaagatgga gga	aataaagc (	caccaattct	gttgtaaata	aaaataaagt	840
tacttacaaa gag					853
<210> 971					
<211> 4240 <212> DNA <213> Homo sapiens					
.400: 071					
<400> 971 cagcagagct ggattggggt gt					60
gteeetgtge etgetggggg tg					120
tgccacctta gtctggctgg gg					180
actccatcct ctgcaggagc ca					240
agcaggtett eetcaageeg ga					300
tgcaggacgc cttgctgagt ct					360
tcaaggaggc cctgtcagct gt					420
atggtgagtc ccagctggtg tg					480
teegggagge tateatetee ca					540
tgccagggaa gcccttggcc ag					600
tcatgccgct agcggacaag ga					660
gccagctgag tgataatgag ga					720
ccctgcggag ggtgcaggtc ct					780
agaacccccc ggaggggacg gc					840
accgcaagat cctccaactg tg					900
tcaaagtgct ccaatacctg ca					960
tgtcggagga caatctccag ct				55555	1020
aggtcagctt tcccttgaca gg					1080
agctgaagga cctcacctcc ga					1140 1200
tgcaggccat gctctgtgtc cc					1260
cctgcgcctt caacaagcta ga					1320
agcactgctt ccactacacc ag					1380
agaaactcaa gtgtgagtgc ca					1440
tggatgacgt ctctgtcctg ct					1500
cagagatetg etetgtgtte et					1560
ggggcgtggt ggatgatgag ag					1620
gacacgtggc gaccacgggc ca	agatcctga	acatecetga	cgcatatgcc	taattaaaa	1680
tctaccgcgg cgtggacgac ag	gcaccggct	teegeaegeg	caacaccccc	atgastgggg	1740
tcaagaacga gaaccaggag gt					1800
catggttcag caagttcgac ga	aggacctgg	egaeggeett	tangtataga	aggaggatga	1860
gcatcgccca ttctctccta ta					1920
ccaatgagat gatgatgtac ca					1980
atgatgggat ccagcctgtg go					2040
ctcgttccct gcccgaggat ga					2100
atttcatcaa caactacaaa at					2160
agaagggcta ccgggatccc co					2220
ttgccttgtt tatttcctgc at					2280
tccaggtggc ctcgaaatct gt					2340
agaggcacca ctttgctcag go					2400
atcatttctc ccggaaggac ta					2460
accatttete coggaaggae ta	zccaycyca	cyccygaccc	3403033340		

```
2520
ccacagacct ggcccaccat ctccgcatct tcaaggacct ccagaagatg gctgaggtgg
                                                                    2580
gctacgaccg aaacaacaag cagcaccaca gacttctcct ctgcctcctc atgacctcct
                                                                    2640
gtgacctctc tgaccagacc aagggctgga agactacgag aaagatcgcg gagctgatct
acaaagaatt cttctcccag ggagacctgg agaaggccat gggcaacagg ccgatggaga
                                                                    2700
tgatggaccg ggagaaggcc tatatccctg agctgcaaat cagcttcatg gagcacattg
                                                                    2760
caatgcccat ctacaagctg ttgcaggacc tgttccccaa agcggcagag ctgtacgagc
                                                                    2820
                                                                    2880
gegtggeete caacegtgag caetggaeca aggtgteeca caagtteace ateegeggee
                                                                    2940
tcccaagtaa caactcgctg gacttcctgg atgaggagta cgaggtgcct gatctggatg
                                                                    3000
gcactagggc ccccatcaat ggctgctgca gccttgatgc tgagtgatcc cctccaggac
                                                                    3060
acttccctgc ccaggccacc tcccacagcc ctccactggt ctggccagat gcactgggaa
cagagecacg ggtcctgggt cctagaccag gaetteetgt gtgaccetgg acaagtacta
                                                                    3120
                                                                    3180
ccttcctggg cctcagcttt ctcgtctgta taatggaagc aagacttcca acctcacgga
                                                                    3240
gactttgtaa tttgcttctc tgagagcaca ggggtgacca atgagcagtg ggccctactc
tgcacctctg accacacctt ggcaagtctt tcccaagcca ttctttgtct gagcagcttg
                                                                    3300
                                                                    3360
atggtttctc cttgccccat ttctgcccca ccagatcttt gctcctttcc ctttgaggac
tcccaccett tgggtctcca ggatcctcat ggaaggggaa ggtgagacat ctgagtgagc
                                                                    3420
agagtgtggc atcttggaaa cagtccttag ttctgtggga ggactagaaa cagccgcggc
                                                                    3480
gaaggccccc tgaggaccac tactatactg atggtgggat tgggacctgg gggatacagg
                                                                    3540
ggccccagga agaagctggc cagaggggca gctcagtgct ctgcagagag gggccctggg
                                                                    3600
gagaagcagg atgggattga tgggcaggag ggatccccgc actgggagac aggcccaggt
                                                                    3660
atgaatgagc cagccatgct tectectgee tgtgtgaege tgggegagte tetteeeetg
                                                                    3720
                                                                    3780
tctgggccaa acagggagcg ggtaagacaa tccatgctct aagatccatt ttagatcaat
gtctaaaata gctctatggc tctgcggagt cccagcagag gctatggaat gtttctgcaa
                                                                    3840
ccctaaggca cagagagcca accetgagtg tetcagagge eccetgagtg tteccettgg
                                                                    3900
cetgageece ttacceatte etgeageeag tgagagaeet ggeeteagee tggeageget
                                                                    3960
ctcttcaagg ccatatccac ctgtgccctg gggcttggga gaccccatag gccgggactc
                                                                    4020
ttgggtcagc ccgccactgg cttctctctt tttctccgtt tcattctgtg tgcgttgtgg
                                                                    4080
ggtgggggag ggggtccacc tgccttacct ttctgagttg cctttagaga gatgcgtttt
                                                                    4140
tctaggactc tgtgcaactg tcgtatatgg tcccgtgggc tgaccgcttt gtacatgaga
                                                                    4200
4240
      972
1953
DNA
Homo sapiens
<400> 972
cgctcccacc cgcccgtggc ccgcgcccat ggccgcgcgc gctccacaca actcaccgga
                                                                      60
gtccgcgccc tgcgccgccg accagttcgc agctccgcgc cacggcagcc agtctcacct
                                                                     120
ggcggcaccg cccgcccacc gccccggcca cagcccctgc gcccacggca gcaatcgagg
                                                                     180
                                                                     240
cgaccgcgac agtggtgggg gacgctgctg agtggaagag agcgcagccc ggccaccgga
cctacttact cgccttgctg attgtctatt tttgcgttta caacttttct aagaactttt
                                                                     300
gtatacaaag gaacttttta aaaaagacgc ttccaagtta tatttaatcc aaagaagaag
                                                                     360
gateteggee aatttggggt tttgggtttt ggettegttt tttetetteg ttgaetttgg
                                                                     420
ggttcaggtg ccccagctgc ttcgggctgc cgaggacctt ctgggccccc acattaatga
                                                                     480
ggcagccacc tggcgagtct gacatggctg tcagcgacgc gctgctccca tctttctcca
                                                                     540
cgttcgcgtc tggcccggcg ggaagggaga agacactgcg tcaagcaggt gccccgaata
                                                                     600
accyctygcy gyagyayete teccaeatya agegaettee eccaytyett eecygeegee
                                                                     660
cetatgacet ggeggeggeg acegtggeea cagacetgga gageggegga geeggtgegg
                                                                     720
                                                                     780
ettgeggegg tageaacetg gegeeectae eteggagaga gaeegaggag tteaaegate
tcctggacct ggactttatt ctctccaatt cgctgaccca tcctccggag tcagtggccg
                                                                     840
```

```
900
ccaccgtgtc ctcgtcagcg tcagcctcct cttcgtcgtc gccgtcgagc agcggccctg
ccagcgcgcc ctccacctgc agettcacct atccgatccg ggccgggaac gacccgggcg
                                                                     960
                                                                    1020
tggcgccggg cggcacgggc ggaggcctcc tctatggcag ggagtccgct cccctccga
                                                                    1080
eggeteeett caacetggeg gacateaacg acgtgageec etegggegge ttegtggeeg
agetectgeg gecagaattg gacceggtgt acatteegee geageageeg cageegeeag
                                                                    1140
gtggcgggct gatgggcaag ttcgtgctga aggcgtcgct gagcgcccct ggcagcgagt
                                                                    1200
acggcagccc gtcggtcatc agcgtcagca aaggcagccc tgacggcagc cacccggtgg
                                                                    1260
tggtggcgcc ctacaacggc gggccgccgc gcacgtgccc caagatcaag caggaggcgg
                                                                    1320
                                                                    1380
tetettegtg cacceaettg ggegetggae ceceteteag caatggeeae eggeeggetg
cacacaactt ccccctgggg cggcagctcc ccagcaggag taccccgacc ctgggttttg
                                                                    1440
                                                                    1500
cccacceggg geccaattac ccateettee tgeeegatea gatgeageeg caagteeege
                                                                    1560
cgctccatta ccaagagctc atgccacccg gttcctgcat gccagaggag cccaagccaa
                                                                    1620
                                                                    1680
agaggggaag acgatcgtgg ccccggaaaa ggaccgccac ccacacttgt gattacgcgg
                                                                    1740
gctgcggcaa aacctacaca aagagttccc atctcaaggc acacctgcga acccacacag
                                                                    1800
qtqaqaaacc ttaccactqt gactgggacg gctgtggatg gaaattcgcc cgctcagatg
aactgaccag gcactaccgt aaacacacgg ggcaccgccc gttccagtgc caaaaatgcg
                                                                    1860
accgagcatt ttccaggtcg gaccacctcg ccttacacat gaagaggcat ttttaaatcc
                                                                     1920
                                                                     1953
cagacagtgg atatgaccca cactgccaga aga
       973
990
DNA
Homo sapiens
<\!\!400\!\!>~973ggetgtgeca ggtgeacatt tageaccegt tgeettetet aggageeget eetagettge
                                                                       60
                                                                      120
cttatcacat ccacgtgacc cctcagagca cagcagcttc tgattctcca tcctattttc
ttctcttgac tgatacattt gggcacttct agggaattca gaaaccaagg gaaggggga
                                                                      180
                                                                      240
agtgctggct tttgctcctg cccagctgaa aggcttgaaa acagttcagt aattctgggc
                                                                      300
aggtttctct ccttaaatta aaatccaata tgggcccctc tgtacttaac attccaaatg
                                                                      360
ctcattccaa acactttgcc aacgaaggca aacagtagag aagttaaata cagtgctgcc
                                                                      420
cttgaggete tecaagggaa aggegaatga atatteteca ggeeetetge ttatteetet
ctgcctattg tgaaggcaat caggccagac tattgagggc atctggcagc aggactcagg
                                                                      480
                                                                      540
caggtatgaa gtagccagcc acaagtgtga aaaggaagag tgctgagaga aactgcctag
                                                                      600
tcatgtgata tccctaatgc actgtgcttt cttccctcaa gaaccacccc ttctggttcc
gctgcatgta catgctgatc tggggcaagt ttgtgctgta caaatatgtc acctgttggc
                                                                      660
                                                                      720
tggtcacaga aggagtatgc attttgacgg gcctgggctt caatggcttt gaagaaaagg
                                                                      780
gcaaggcaaa gtgggatgcc tgtgccaaca tgaaggtgtg gctctttgaa acaaaccccc
                                                                      840
gcttcactgg caccattgcc tcattcaaca tcaacaccaa cgcctgggtg gcccggtgag
ctgctggtgg ggagcctgga ccctggttcc ttccttccac tgtcttccca gattggaggg
                                                                      900
caggggtgta ccatgtcacc cctatgcgtc tttcccatct gggcagaacc ccctgtcgct
                                                                      960
                                                                      990
cacactgact ttgaccccca cctatacccc
      974
1198
DNA
Homo sapiens
^{<400>} 974 cctttatgtc tagcacattt gatgaaataa aaaacttctg aatctgaata gaagttctac
                                                                      60
tgtttcaggc ttgaaccttt tacatgctca agagattcaa atggtctctg tgtgtagatc
                                                                      120
atgccaccgc ctccaaagcc taatccacat cacttctgag aggcaaggct gagcatatgg
                                                                      180
tgacatcagc tctgtgttga gatggtgatg aggatgatgg ctcgctggcc aggcagggca
                                                                      240
gccgaaggtc agggacctgt cctaactaac tgcagccttg cctttagtgt ttgtcattct
                                                                      300
```

```
360
cagatacaac acggtatgtc cagtgtccgt ttttattact ttaaagcatt tgagggctta
attgtgtata gtagaaatac tattttagac aaataattat ctgtgtacag atatttgata
                                                                      420
tactctaagt aaattttcta atttcactaa gtacgttttt aggctcctct caaatactgc
                                                                      480
gtattgaaga aaaaaatctg acaccaccga gccaaagatg cttttttgtc tgttttcgtt
                                                                      540
                                                                      600
qtttaacaga atggaaagag taatgcatag tgcttcctgg tgtctcctga ttgattgatt
gtgcacaaag taggacgata aataaataaa atggagtctg atgggacatt gattaaaggt
                                                                      660
                                                                      720
gaaggatgat tgatatatag atcatgaaaa gaaaaatgaa tggcaggaaa aaaagtttgg
tccttaatat actttggcct agttaaaata tgtgcctttt tggtgtgttt tgttcatcac
                                                                      780
                                                                      840
tacaagataa aaaggaaaca ttacaactca agtctttaaa aagttcattt attgaaaatc
atatgtataa cctagcatac gaatgagcag atttaaacac ataacttcaa gccatttctg
                                                                      900
aaaacataca ccaggagctc tgctcagcta gagtcagact ccagctccag cccgactgcg
                                                                      960
tgcggggaca gcgcccgcgt tgatgaggac cagccccact gcaggctgag gcggtgtcac
                                                                     1020
                                                                     1080
cctgggaagg tcgtggtgcg ttgtggcata ttaagtctaa accagatgaa tgtaaatatc
                                                                     1140
tetttgtaaa teatttattt caetetgtte catecaggte ageaateaga ttgtggeatg
ctqqqtaact qqaaaaaata ataaaaaqta agtttcaata aaaaaaaaa aaaaaaaa
                                                                     1198
      975
3881
DNA
Homo sapiens
<400> 975
gctgaagtgt tcgaccagca ggaggttttc tcctcagccc actcgctgca tccagatcag
                                                                       60
ctcaccccgc gccctttcct gcccaccagg actctgatag cccctggcag ccacagccca
                                                                       120
                                                                       180
ttttgccaag atgtctagag tagccaaata tcgccggcag tgagtgaaga ccccgacatc
gacageetge tgggaeeetg teteeegagg agatggagga getggagaag gagetggaeg
                                                                       240
                                                                       300
tggtggaccc agacgggagt gttcccgtgg ggctgcggca gagaaaccag acggagaaac
agtccacggg tgtgtacaac cgggaggcca tgctcaactt ctgtgaaaag gagaccaaga
                                                                       360
                                                                       420
aacttatgca gagggagatg tccatggatg aaagcaagca agtggagacc aagacagatg
                                                                       480
ccaagaatgg acaggaaagg ggcagagatg ccagcaaaaa agccctgggc cccagacgga
actcagatct ggggaaggag ccaaagaggg gtggtttaaa gaaaagcttc tctagagaca
                                                                       540
                                                                       600
gagatgaagc tggtggcaag agtggcgaga agcccaagga ggagaagatc atccggggca
                                                                       660
ttgacaaggg ccgggtcagg gctgcagtgg ataagaagga ggcagggaag gatgggagag
                                                                       720
gagaggagag ggcagtggcc accaagaagg aagaggagaa gaaagggggt gacaggaaca
                                                                       780
caggettgag cagggacaag gataaaaaga gagaggagat gaaggaggtg gccaagaaag
                                                                       840
aggatgatga gaaggtaaaa ggggagcgta ggaacacaga caccagaaaa gagggtgaga
                                                                       900
agatgaaaag agcaggtggg aacacagaca tgaaaaagga ggatgagaag gtaaaaagag
gaactgggaa cacagacacc aaaaaggacg atgaaaaagt caagaagaat gaacccttac
                                                                       960
                                                                     1020
atgaaaagga agccaaggat gacagcaaga ccaaaacacc cgagaaacag acgcccagtg
                                                                     1080
gccccaccaa gccctctgaa ggaccggcca aggtggagga ggaggcagct cccagcatat
ttgatgagcc tctggagaga gtgaagaaca atgaccccga gatgactgag gtgaacgtca
                                                                     1140
                                                                     1200
acaactcaga ctgcatcaca aatgagatct tggtccggtt tactgaggct ctggagttca
                                                                     1260
acactqtqqt taagctqttc gccttggcca acacgcgagc cgatgaccac gtggcctttg
                                                                     1320
ccattgccat catgctcaag gccaacaaga ccatcaccag cctcaacctg gactccaacc
                                                                     1380
acatcacagg caaaggcatc ctggccatct tccgggccct cctccagaac aacacgctga
ccgagctccg cttccacaac cagcgacaca tctgtggagg caagacggag atggagatcg
                                                                     1440
                                                                     1500
ccaagetget gaaggagaat aceteeetge teaagetggg etaccatttt gagetggeeg
ggccccgaat gactgtcacc aatctgctca gccgcaacat ggacaagcag agacaaagc
                                                                     1560
ggctgcagga gcaaaggcag gcacaggaag ccaagggaga gaagaaggat ctgctggagg
                                                                     1620
                                                                     1680
tacccaaqqc cggggccgtg gctaagggct ccccaaaacc ttcacctcaa ccatctccaa
agecetetee aaagaactea eecaaaaaag ggggtgetee agetgeeeca eeaceeeete
                                                                     1740
```

```
1800
cccctccctt ggctccaccc cttatcatgg agaacctgaa gaattcactc tcaccagcta
cccagaggaa gatgggagac aaagtcctcc ctgcccagga gaagaactcc cgtgaccagc
                                                                  1860
tattggctgc catccgctcc agcaacctca agcagctcaa gaaggtggaa gtgcccaaac
                                                                  1920
                                                                  1980
tgcttcagta ggaccaggct gccaggcacc atctgccaat gccatgactg ctcaggcctc
                                                                  2040
acctcccagg gctacacaga ccctgcccac cccatccctg gctgacctgc tgtggatgtc
cctattctgc catgggagcg tccaggcctg ggtcacgctc aaggaaggat gccttatctc
                                                                  2100
                                                                  2160
ttctcacttt ccttttcttg tctctgaggc tctccaaatt ttgctttagt acatggagct
                                                                  2220
caqqtttctq qacaagaaga gtccttttag cacatcactg agaagatggc actgtccagg
                                                                  2280
gcccatgtag ctggcaagct gcaaaaggcc tgtgatccag gaaagatgtc ccacagggac
cacatccacc ccagccccac tgccctccag ggccaggatt caggcctctg aggagcccac
                                                                  2340
                                                                  2400
ggggcaaagc tgctgggcca gtggcactct gtgtgggaaa atggcagaaa gatggagagg
                                                                  2460
catgggggcc caaaggggag cgtggggagg ggctgaggat accccaaagt ccaggctaat
                                                                  2520
tagaggatgt ggcaggggca gtggcctgga tgcacagtgc ctgatgggag taggctccag
acaggaggag tgggacagac agcagctgga cttgaaggtt tgatgccaaa gcagacattt
                                                                  2580
                                                                  2640
tecteacace cacetgetge tgtatgaata getgtgtate tgttttteca taagattttg
                                                                  2700
ataatatata caaaccttta gctgtgaatg gctgtgcccc acctgttgtc ctgaactgtg
agtcctgatc ctaaccctgg gctccctgga ggactctaga agctcaggtt ccctgccaca
                                                                  2760
ctatttgagt tggccaagaa ataaattcac atcctcagaa agtgcagcat ggaggaaaat
                                                                  2820
                                                                  2880
tctactaqqt ctqctcctga accagtcctg ctgcctggag tcagtagcca gagttgttct
                                                                  2940
                                                                  3000
caggggtgct ggggcagagt ggagcccagg gtgctgggat ggctatatta ggcatgttca
                                                                  3060
gggatgctca ttccatgact ctgcctaacc atgggctcag ggccaggtcc tcacagcagt
cacaggeeca ggaaggegge aggeagagaa gtggagtgae tatttggaga atageaceea
                                                                  3120
                                                                  3180
tatctgtgtg ccctagggct cagaggggcc tcatcttccc cagccctccc cacctgctca
ccaattccac ttcctgcccc aactgcagga atgctgacaa tgctgccatg cccaccatcg
                                                                  3240
                                                                  3300
ggtgtaggtg aaaggcatct ttctgaattt cattctcttg aaggtgctgc caccccttgg
cactgtggaa ctgccacctt gggtctgtgt cacttgtagg tttctctgcc tccaggttgc
                                                                  3360
                                                                  3420
ctcaacagca ggaggcacag cagtttcacc atctttgagg tgagggtggg gtgccccagc
                                                                  3480
taggaagcaa gatcgctgtg ctaggtctga ccaaaaccag agggcagtct agtcctgggg
gtaaagccct cagatcccag ggtacactct tctccattcc ctccacccac ttgcctgtca
                                                                  3540
                                                                  3600
tggacctaaa gggtatgagc tggagctaag gccagctaga gcttccactg tcagccctca
                                                                  3660
                                                                  3720
ctgtcagccc cactgcaccc ccctgtgcct gctgggcact gggcactagc tagatgcttt
                                                                  3780
aggttgette agetgateet teaactetgt gaggtggata eeaatattet attttgeaga
                                                                  3840
tagaatttgg cccagagagg ttaactaata tatccatgat cacacagcta ataaaagtca
                                                                  3881
gagctcagga aaaaaaaaaa aaaaaaaaaa aaaaaaaaa a
      976
874
DNA
Homo sapiens
gggcgggaag acgtgcagcc tgggccgtgg ctgctcactg cgttcggacc cagacccgct
                                                                    60
gcaggcagca gcagcccceg cccgcgcacg agcatggagc tctggggggc ctacctcctc
                                                                   120
                                                                   180
etetgeetet teteceteet gaeceaggte accacegage caccaaceca gaageecaag
                                                                   240
aagattgtaa atgccaagaa agatgttgtg aacacaaaga tgtttgagga gctcaagagc
                                                                   300
cgtctggaca ccctggccca ggaggtggcc ctgctgaagg agcagcaggc cctgcagacg
                                                                   360
gtctgcctga aggggaccaa ggtgcacatg aaatgctttc tggccttcac ccagacgaag
                                                                   420
accttccacg aggccagcga ggactgcatc tcgcgcgggg gcaccctgag caccctcag
actggctcgg agaacgacgc cctgtatgag tacctgcgcc agagcgtggg caacgaggcc
                                                                   480
```

	L		~~~~~~~		ant-magaana	E40
	tgggcctcaa					540
	cctacaagaa					600
	gegeggteet					660
	tgccctacat	=				720
	ggaggagggc					780
gcccccatcc	tctccgtgcg	cttggagcct	ctttttgcaa	ataaagttgg	tgcacgttcg	840
cggagaggaa	aaaaaaaaa	aaaaaaaaa	aaaa			874
	o sapiens					
<400> 977 gaattccgag	agaagacctg	actggcacga	ggaaaggtgc	aataatgaag	agttttcttc	60
tagttgtcaa	tgccctggca	ttaaccctgc	cttttttggc	tgtggaggtt	caaaaccaga	120
aacaaccagc	atgccatgag	aatgatgaaa	gaccattcta	tcagaaaaca	gctccatatg	180
	ttatgtgcca					240
gaccagctat	agcaattaat	aatccatatg	tgcctcgcac	atattatgca	aacccagctg	300
_	acatgcccaa					360
	tcgcccaaac					420
	aatcatccct					480
	accaacggtg					540
	ccctgagaca					600
	caaagaacac					660
	atttgtctgc					720
		ttcatgccac				780
						840
ccaactgatt	gcaaaaaaaa					840 857
ccaactgatt aaaaaaaacc	gcaaaaaaaa					
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA	gcaaaaaaaa ggaattc 2					
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978	gcaaaaaaaa ggaattc 2 o sapiens	aaaaaaaaaa	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa	
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc	gcaaaaaaaa ggaattc  2 o sapiens tctcctcctc	aaaaaaaaaa	aaaaaaaaaataaata	aaaaaaaaaa	aaaaaaaaaaccccccccccccccccccccccccccccc	857
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc	gcaaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatcccct	aaaaaaaaa ctcgcccttc tgccctccc	tcctcgcct cagcccaggg	aaaaaaaaa cctcctcctc acttttccgg	aaaaaaaaa ctcgcctcc aaagtttta	857
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc	gcaaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatcccct gggctctcgg	aaaaaaaaaa ctcgcccttc tgccctcccc agaaagaagc	tectegeeet cageecaggg	aaaaaaaaaa cctcctcctc acttttccgg gcggctgcaa	aaaaaaaaaa ctcgccctcc aaagtttta aactttcctg	857 60 120
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct	gcaaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatcccct gggctctcgg gccagccccc	ctcgcccttc tgccctcccc agaaagaagc gccctccgct	tcctcgcct cagcccaggg tcctggctca gcccggccct	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc	ctcgcctcc aaagtttta aactttcctg gagcgatgag	60 120 180
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc	gcaaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge	ctcgcccttc tgccctcccc agaaagaagc gccctccgct	tectegeeet cageecaggg teetggetea geeggeeet getgetgeee	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg	ctcgccctcc aaagtttta aactttcctg gagcgatgag cagctgccgc	60 120 180 240
ccaactgatt aaaaaaaacc <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc agcggccgcc	gcaaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatcccct gggctctcgg gccagcccc gtcctgcggc	ctcgcccttc tgccctcccc agaaagaagc gcctccgct cgcccagtcc cagggtccgg	tectegeeet cageecaggg teetggeeet getgetgeee geeeggeeet	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg	ctcgccctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt	60 120 180 240 300
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccccc	gcaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatcccct gggctctcgg gccagcccc gtcctgcggc gcactggtcc gtcggggca	ctcgcccttc tgccctcccc agaaagaagc gccctccgct cgcccagtcc cagggtccgg tctcgttcca	tectegeeet cageeeagg tectggeeet getgetgee geeeggeeet tetgeagate	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg gcgccgttct ggcctgagcc	ctcgcctcc aaagtttta aactttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt	60 120 180 240 300 360
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccccg gctgctgctg	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geaetggtee gteggggea eaggaetegt	ctcgcccttc tgccctcccc agaaagaagc gccctccgct cgcccagtcc cagggtccgg tctcgttcca ccggggacta	tectegeet cageecaggg tectggetea geeggeeet getgetgeee geegggeee tetgeagate cageetggeg	cetectecte acttttcegg geggetgeaa gegeeegee gtggeggegg gegeegttet ggeetgagee caegteegeg	ctcgcctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg	60 120 180 240 300 360 420
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgcccctccg agcggccccg gctgctgctg ctccattgtc	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgege geactggtee gteggggea eaggaetegt gaecagaagt	ctcgcccttc tgccctcccc agaaagaagc gccctccgct cgcccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg	tectegeeet cageecaggg teetggetea geeeggeeet getgetgeee geeegggeee tetgeagate cageetggeg tggtttetae	cetecteete actttteegg geggetgeaa gegeeegee gtggeggegg gegeegteet ggeetgagee caegteegeg ggaatgtatg	ctcgccctcc aaagtttta aactttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct	60 120 180 240 300 360 420 480
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccgcc gctgctgctg ctccattgtc gctttttcgc	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geaetggtee gteggggea eaggaetegt	ctcgccttc tgcctcccc agaaagaagc gcctccgct cgccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg	tcctcgcct cagcccaggg tcctggctca gcccggcct gctgctgcc gcccgggcc tctgcagatc cagcctggcg tggtttctac catccttcag	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg gcgccttct ggcctgagcc cacgtccgcg ggaatgtatg ctggtgaaag	ctcgcctcc aaagtttta aactttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga	60 120 180 240 300 360 420 480 540
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom  <400> 978 gaattccttc cctccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccccg gctgctgctg ctccattgtc gctttttcgc tatccaggaa	gcaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatccct gggctctcgg gccagcccc gtcctgcggc gcactggtcc gtcgggggca caggactcgt gaccagaagt catgacccta	ctcgcccttc tgccctcccc agaaagaagc gcctccgct cgccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt	tectegeet cageecaggg tectggetea geeggeeet getgetgeee geegggeee tetgeagate cageetggeg tggttetae cateetteag ettgteaegt	cetectecte acttttcegg geggetgeaa gegeeegee gtggeggegg gegeegttet ggeetgagee caegteegeg ggaatgtatg etggtgaaag teegeeacet	ctcgcctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt	60 120 180 240 300 360 420 480 540 600
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgcccctccg agcggccccg gctgctgctg ctccattgtc gctttttcg tatccaggaa tcagattcgt	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geaetggtee gteggggea caggaetegt gaecagaete gaecagaagt catgaeeeta ggegatetta	ctcgcccttc tgccctcccc agaaagaagc gccctccgct cgcccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt	tectegeeet cageecaggg tectggeeet getgetgeee getgetgeee tetgeagate cageetggeg tggttetae cateetteag ettgteacgt ttcatacaga	cetectecte actttteegg geggetgeaa gegeeegee gtggeggegg gegeegttet ggeetgagee caegteegeg ggaatgtatg etggtgaaag teegeeacet getecaget	ctcgccctcc aaagtttta aactttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt tctgtgatca	60 120 180 240 300 360 420 480 540 600 660
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc ggcgccccg agcggccccg gctgctgctg ctccattgtc gctttttcgc tatccaggaa tcagattcgt ctgtggagaa	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geaetggtee gteggggea eaggaetegt gaceagaetegt gaceagaagt eatgaeeeta ggegatetta ececaegete	ctcgcccttc tgccctcccc agaaagaagc gcctccgct cgcccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt tctttgttca ggctggtacg	tectegeet cageecaggg teetggetea geeggeet getgetgee geegggee tetgeagate cageetggeg tggttetae cateetteag ettgteaegt tteataeaga tcaaggtett	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg gcgccttct ggcctgagcc cacgtccgcg ggaatgtatg ctggtgaaag tccgccacct gctccagctt aaatgtgaag	ctcgcctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt tctgtgatca ggtgtggtct	60 120 180 240 300 360 420 480 540 600 660 720
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccgcc gctgctgctg ctccattgtc gcttttcgc tatccaggaa tcagattcgt ctgtggagaa gaattaccat	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geactggtee gteggggea eaggaetegt gaccagaagt eatgaeeeta ggegatetta ececaegete atgetgtggg	ctcgccttc tgccctccc agaaagaagc gcctccgct cgccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt tctttgtca ggctggtacg catttaaaat	tectegeeet cageeeagg teetgetgee geeggeee tetgeagate cageetgeeg tegttetae cateetteag ettgteaegt teataeaga teaaggtett acceaeaat	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg gcgccgttct ggcctgagcc cacgtccgcg ggaatgtatg ctggtgaaag tccgccacct gctccagct aaatgtgaag tgcagcggtg	ctcgcctcc aaagtttta aactttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt tctgtgatca ggtgtggtct tgaggcggag	60 120 180 240 300 360 420 480 540 600 660 720 780
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccccg gctgctgctg ctccattgtc gcttttcgc tatccaggaa tcagattcgt ctgtggagaa gaattaccat aaggctctca	gcaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatccct gggctctcgg gccagcccc gtcctgcggc gcactggtcc gtcggggca caggactcgt gaccagaagt catgaccta ggcgatctta ccccacgctc atgctgtggg aagagatgtg	ctcgccttc tgcctcccc agaaagaagc gcctccgct cgccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt tctttgtca ggctggtacg catttaaaat tcactgggt	tectegeet cageecaggg tectggetea geeeggeeet getgetgeee geeegggeee tetgeagate cageetggeg tggtttetae cateetteag ettgteaegt tteataeaga teaaggtett acceaacaat cageaccate	cetectecte acttttcegg geggetgeaa gegeeegee gtggeggegg gegeegttet ggeetgagee caegteegeg ggaatgtatg ctggtgaaag teegeeacet getecaget aaatgtgaag tgeageggtg cgeacateat	ctcgcctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt tctgtgatca ggtgtggtct tgaggcggag ctgctgaact	60 120 180 240 300 360 420 480 540 600 660 720 780 840
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc ggcgccccg gctgctgctg ctccattgtc gctttttcgc tatccaggaa tcagattcgt ctgtggagaa gaattaccat aaggctctca ctctacaagt	gcaaaaaaa ggaattc  2 o sapiens tctcctcctc ctcatccct gggctctcgg gccagcccc gtcctgcggc gcactggtcc gtcggggca caggactcgt gaccagaagt catgaccta ggcgatctta ccccacgctc atgctgtggg aagagatgtg	ctcgccttc tgccctcccc agaaagaagc gccctccgct cgcccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt tctttgtca ggctggtacg catttaaaat tcactggggt agcccttct	tectegeet cageecaggg teetggetea geeggeeet getgetgeee geegggeee tetgeagate cageetggeg tggtttetae cateetteag ettgteacgt tteatacaga teaaggtett acceaacaat cageaceate geaaaaatca	cetecteete actttteegg geggetgeaa gegeeegee gtggeggegg gegeegteet ggeetgagee caegteegeg ggaatgtatg etggtgaaag teegeeacet geteeagett aaatgtgaag tgeageggtg egeacateat ceateagagt	ctcgccctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatcct cggccagtga ttgaagactt tctgtgatca ggtgtggtct tgaggcggag ctgctgaact cgtttattgg	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900
ccaactgatt aaaaaaaacc  <210> 978 <211> 374 <212> DNA <213> Hom  <400> 978 gaattccttc cctcccgatc ttttccgtct ctgccgcgcc cgccctccg agcggccgcc gctgctgctg ctccattgtc gcttttcgc tatccaggaa tcagattcgt ctgtggagaa gaattaccat aaggctctca ctctacaagt tcgagagaag	gcaaaaaaa ggaattc  2 o sapiens teteeteete eteateeet gggetetegg gecageeee gteetgegge geactggtee gteggggea caggaetegt gaccagaagt catgaeeeta ggegatetta ececaegete atgetgtggg aagagatgtg aacgttteee geeeetgatg	ctcgccttc tgccctccc agaaagaagc gcctccgct cgccagtcc cagggtccgg tctcgttcca ccggggacta tccctgaatg cctctgaaaa ttgaagtggt tctttgtca ggctggtacg catttaaaat tcactggggt agcccttct ctcaatcata	tcctcgcct cagcccaggg tcctggctca gcccggccct gctgctgccc gccgggccc tctgcagatc cagcctggcg tggttctac catccttcag cttgtcacgt ttcatacaga tcaaggtctt acccaacaat cagcaccatc gcaaaaatca cattggacga	cctcctcctc acttttccgg gcggctgcaa gcgccccgcc gtggcggcgg gcgccgttct ggcctgagcc cacgtccgcg ggaatgtatg ctggtgaaag tccgccacct gctccagctt aaatgtgaag tgcagcggtg cgcacatcat ccatcagagt ccaattcacc	ctcgcctcc aaagtttta aacttcctg gagcgatgag cagctgccgc tggctcctgt gtgagccggt agatggcttg ataagatct cggccagtga ttgaagactt tctgtgatca ggtgtggtct tgaggcggag ctgctgaact cgtttattgg ttgacaagat	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 960

```
1140
agtgtgccag tactgcaaga agcttctgaa ggggcttttc aggcagggct tgcagtgcaa
                                                                     1200
agattgcaga ttcaactgcc ataaacgttg tgcaccgaaa gtaccaaaca actgccttgg
                                                                     1260
cgaagtgacc attaatggag atttgcttag ccctggggca gagtctgatg tggtcatgga
agaagggagt gatgacaatg atagtgaaag gaacagtggg ctcatggatg atatggaaga
                                                                     1320
                                                                     1380
agcaatggtc caagatgcag agatggcaat ggcagagtgc cagaacgaca gtggcgagat
                                                                     1440
qcaagatcca gacccagacc acgaggacgc caacagaacc atcagtccat caacaagcaa
caatatccca ctcatgaggg tagtgcagtc tgtcaaacac acgaagagga aaagcagcac
                                                                     1500
                                                                     1560
aqtcatqaaa qaaggatgga tggtccacta caccagcaag gacacgctgc ggaaacggca
                                                                     1620
ctattggaga ttggatagca aatgtattac cctctttcag aatgacacag gaagcaggta
ctacaaggaa attcctttat ctgaaatttt gtctctggaa ccagtaaaaa cttcagcttt
                                                                     1680
                                                                     1740
aattcctaat ggggccaatc ctcattgttt cgaaatcact acggcaaatg tagtgtatta
                                                                     1800
tqtqqqaqaa aatqtggtca atccttccag cccatcacca aataacagtg ttctcaccag
tggcgttggt gcagatgtgg ccaggatgtg ggagatagcc atccagcatg cccttatgcc
                                                                     1860
                                                                     1920
cqtcattccc aaqqqctcct ccgtgggtac aggaaccaac ttgcacagag atatctctgt
                                                                     1980
qaqtatttca gtatcaaatt gccagattca agaaaatgtg gacatcagca cagtatatca
qatttttcct gatgaagtac tgggttctgg acagtttgga attgtttatg gaggaaaaca
                                                                     2040
tcgtaaaaca ggaagagatg tagctattaa aatcattgac aaattacgat ttccaacaaa
                                                                     2100
                                                                     2160
acaagaaagc cagcttcgta atgaggttgc aattctacag aaccttcatc accctggtgt
                                                                     2220
tqtaaatttg gagtgtatgt ttgagacgcc tgaaagagtg tttgttgtta tggaaaaact
                                                                     2280
ccatggagac atgctggaaa tgatcttgtc aagtgaaaag ggcaggttgc cagagcacat
aacgaagttt ttaattactc agatactcgt ggctttgcgg caccttcatt ttaaaaaatat
                                                                     2340
                                                                     2400
cqttcactgt gacctcaaac cagaaaatgt gttgctagcc tcagctgatc cttttcctca
                                                                     2460
ggtgaaactt tgtgattttg gttttgcccg gatcattgga gagaagtctt tccggaggtc
agtggtgggt acccccgctt acctggctcc tgaggtccta aggaacaagg gctacaatcg
                                                                     2520
                                                                     2580
ctctctagac atgtggtctg ttggggtcat catctatgta agcctaagcg gcacattccc
atttaatgaa gatgaagaca tacacgacca aattcagaat gcagctttca tgtatccacc
                                                                     2640
                                                                     2700
aaatccctgg aaggaaatat ctcatgaagc cattgatctt atcaacaatt tgctgcaagt
aaaaatgaga aagcgctaca gtgtggataa gaccttgagc cacccttggc tacaggacta
                                                                     2760
                                                                     2820
tcaqacctqq ttaqatttgc gagagctgga atgcaaaatc ggggagcgct acatcaccca
tgaaagtgat gacctgaggt gggagaagta tgcaggcgag cagcggctgc agtaccccac
                                                                     2880
                                                                     2940
acacctgatc aatccaagtg ctagccacag tgacactcct gagactgaag aaacagaaat
                                                                     3000
qaaaqccctc qqtqaqcqtq tcagcatcct ctgagttcca tctcctataa tctgtcaaaa
                                                                     3060
cactgtggaa ctaataaata catacggtca ggtttaacat ttgccttgca gaactgccat
                                                                     3120
tattttctgt cagatgagaa caaagctgtt aaactgttag cactgttgat gtatctgagt
                                                                     3180
tgccaagaca aatcaacaga agcatttgta ttttgtgtga ccaactgtgt tgtattaaca
aaagttccct gaaacacgaa acttgttatt gtgaatgatt catgttatat ttaatgcatt
                                                                     3240
aaacctgtct ccactgtgcc tttgcaaatc agtgtttttc ttactggagc ttcattttgg
                                                                     3300
taagagacag aatgtatctg tgaagtagtt ctgtttggtg tgtcccattg gtgttgtcat
                                                                     3360
                                                                     3420
tgtaaacaaa ctcttgaaga gtcgattatt tccagtgttc tatgaacaac tccaaaaccc
atqtqqqaaa aaaatgaatg aggagggtag ggaataaaat cctaagacac aaatgcatga
                                                                     3480
acaagtttta atgtatagtt ttgaatcctt tgcctgcctg gtgtgcctca gtatatttaa
                                                                     3540
actcaagaca atgcacctag ctgtgcaaga cctagtgctc ttaagcctaa atgccttaga
                                                                     3600
                                                                     3660
aatgtaaact gccatatata acagatacat ttccctcttt cttataatac tctgttgtac
                                                                     3720
tatggaaaat cagctgctca gcaacctttc acctttgtgt atttttcaat aataaaaaat
                                                                     3742
attcttqtca aaaaaaaaaa aa
```

<210> 979 <211> 2224 <212> DNA <213> Homo sapiens

```
60
cggggacagg cactcgggct ggcactggct gctagggatg tcgtcctgga taaggtggca
                                                                  120
tggacccgcc atggcgcgcc tctggggctt ctgctggctg gttgtgggct tctggagggc
                                                                  180
                                                                  240
cgctttcgcc tgtcccacgt cctgcaaatg cagtgcctct cggatctggt gcagcgaccc
                                                                  300
ttctcctggc atcgtggcat ttccgagatt ggagcctaac agtgtagatc ctgagaacat
caccgaaatt ttcatcgcaa accagaaaag gttagaaatc atcaacgaag atgatgttga
                                                                  360
                                                                  420
agettatgtg ggaetgagaa atetgaeaat tgtggattet ggattaaaat ttgtggetea
taaagcattt ctgaaaaaca gcaacctgca gcacatcaat tttacccgaa acaaactgac
                                                                  480
                                                                  540
gagtttgtct aggaaacatt tccgtcacct tgacttgtct gaactgatcc tggtgggcaa
                                                                  600
tccatttaca tgctcctgtg acattatgtg gatcaagact ctccaagagg ctaaatccag
tccagacact caggatttgt actgcctgaa tgaaagcagc aagaatattc ccctggcaaa
                                                                  660
cctgcagata cccaattgtg gtttgccatc tgcaaatctg gccgcaccta acctcactgt
                                                                  720
ggaggaagga aagtctatca cattatcctg tagtgtggca ggtgatccgg ttcctaatat
                                                                  780
gtattgggat gttggtaacc tggtttccaa acacatgaat gaaacaagcc acacacaggg
                                                                  840
                                                                  900
ctccttaaqq ataactaaca tttcatccga tgacagtggg aagcagatct cttgtgtggc
ggaaaatctt gtaggagaag atcaagattc tgtcaacctc actgtgcatt ttgcaccaac
                                                                  960
tatcacattt ctcgaatctc caacctcaga ccaccactgg tgcattccat tcactgtgaa
                                                                 1020
                                                                 1080
aggcaacccc aaaccagcgc ttcagtggtt ctataacggg gcaatattga atgagtccaa
                                                                 1140
atacatetgt actaaaatae atgttaeeaa teacaeggag taecaegget geeteeaget
ggataatccc actcacatga acaatgggga ctacactcta atagccaaga atgagtatgg
                                                                 1200
                                                                 1260
gaaggatgag aaacagattt ctgctcactt catgggctgg cctggaattg acgatggtgc
                                                                 1320
aaacccaaat tatcctgatg taatttatga agattatgga actgcagcga atgacatcgg
                                                                 1380
ggacaccacg aacagaagta atgaaatccc ttccacagac gtcactgata aaaccggtcg
ggaacatctc tcggtctatg ctgtggtggt gattgcgtct gtggtgggat tttgcctttt
                                                                 1440
ggtaatgctg tttctgctta agttggcaag acactccaag tttggcatga aaggttttgt
                                                                 1500
                                                                 1560
tttgtttcat aagatcccac tggatgggta gctgaaataa aagaaaagac agagaaaggg
gctgtggtgc ttgttggttg atgctgccat gtaagctgga ctcctgggac tgctgttggc
                                                                 1620
                                                                 1680
ttatcccggg aagtgctgct tatctggggt tttctggtag atgtgggcgg tgtttggagg
                                                                 1740
ctgtactata tgaagcctgc atatactgtg agctgtgatt ggggaacacc aatgcagagg
                                                                 1800
1860
tacagtagtt caaatacaaa actgaaatga aatcccattg gattgtactt ctcttctgaa
aagtgtgctt tttgacccta ctggacattt attgacttaa ttgcttctgt ttattaaaat
                                                                 1920
                                                                 1980
tgacctgcaa agttaaaaaa aaattaaagt tgagaacagg tataagtgca cactgaatag
                                                                 2040
tctaatctac atgtaacaca tattttagta tgattttcta tactctaatc agcactgaat
                                                                 2100
tcagagggtt tgactttttc atctataaca cagtgactaa aagagttaag ggtatatata
ccatcacttt gggacttggt agtattatta aaaggttatt tccttcactg tcaataaaag
                                                                 2160
tccaaatgtt tagcttaggt ctgagagtca aacaatgtta aggattgtct taaagttcct
                                                                 2220
                                                                 2224
tagc
      980
3573
DNA
Homo sapiens
      misc feature
n=a,t,g or c
<400> 980 tctagacana taaaaataaa agaaatcatc caagaatggt gacttgccta ctattctact
                                                                   60
cgagaggctg agaggggagg atttcttgag cccaggagtt tgaggatgca gtgagctatg
                                                                  120
180
```

		aaatataata	aaaaaaattt	agaagggat	aataaaceae	240
	ggtggctcat					300
	ccaggagttt					360
	aaaattaact					420
	ggaggaatgc					480
	tccaacctgg					540
	gggaataggt					600
	cctgagtcta					
	gaacagggtg					660
	ctgacatgat					720
	ctgtaactat					780
	taaggaagct					840
	tctggtgaag					900
	atattcagtc					960
	cctgccccac					1020
	ccagagggga					1080
	atatttcaac					1140
tcactgggaa	agttgtgagc	tgctttggac	cttatctggg	aatttccttg	ggcttacagc	1200
ctttacccta	tccttgaaat	ggttctggtt	tcatagcaac	ttctaggtgg	tgtgggcgaa	1260
gtttgggact	ggtttagggc	ggggacaaga	ccaagaacac	aagtttcctt	gtactaggga	1320
gagagggagg	ggaggaaatt	ggagacccca	gcaccccctt	gctcactctc	ttgctcacag	1380
tccacgatgg	cccggtccct	ggtgtgcctt	ggtgtcatca	tcttgctgtc	tgccttctcc	1440
ggacctggtg	tcaggggtgg	tcctatgccc	aagctggctg	accggaagct	gtgtgcggac	1500
caggagtgca	gccgtaagaa	tggggagggg	tagaattggg	cttgggtgtt	agcctgtgtg	1560
gatgtgctgc	attccccttc	tattccttcc	ctagacccta	tctccatggc	tgtggccctt	1620
caggactaca	tggcccccga	ctgccgattc	ctgaccattc	accggggcca	agtggtgtat	1680
gtcttctcca	agctgaaggg	ccgtgggcgg	ctcttctggg	gaggcagcgt	gcgtcttggg	1740
agagtgaaag	agggaagggt	acagagctgg	ggtagactca	ttatccccat	gaagggaaga	1800
tttgaggggg	gtgaactgaa	atagacattg	tggggggata	ttgttactta	ctttatttta	1860
	attttttaat					1920
-	cgatctcggc					1980
	cccaagtacc					2040
-	agagacaggg					2100
	ccgccttggc					2160
ccagcctatt	ttcactttat	ttaccaattt	taggacctga	tatggtccca	nnntctgttc	2220
					gagggaaatg	2280
	aaggcataaa					2340
					agcctgggca	2400
	accccatct					2460
	tcccggctac					2520
	gtgagccgtg					2580
					ttaacagaga	2640
					gattcatatg	2700
					gccttcagca	2760
					ggttcaggga	2820
					tgtccgagag	2880
	tgaaacctgg					2940
					gctcccacac	3000

ttggctccct	ggccgcctag	gtatgtgcgc	tgggagaaat	tctttccctg	cctcaatttt	3060
ctcaccagta						3120
gcatagcann						3180
gatcctttgt						3240
aatgggattt						3300
gggtttatgc						3360
gggtagggta						3420
				cagagtttcg		3480
				caagcaaaga		3540
agcccaacta				oaagoaaaga		3573
ageceaacea	gggaccgcag	cgccccccc	aga			30.0
<210> 981 <211> 1130 <212> DNA <213> Homo	sapiens					
<400> 981	acteagacte	caactacaac	tecageeege	gatgccccat	tecataacee	60
				ggacttcagc		120
						180
				tgccctgtgc		240
				acacctggag		
				caggcctgag		300
				gatccacatc		360
				caccgggact		420
				ttgctttcca		480
				cctgcatgtg		540
				cagagtcgac		600
				cgcggagccc		660
				gggcggggat		720
ctggcggccc	ccggaacctc	aagcccacgg	ccagcaagct	gggcgctccg	ctgagcggcc	780
				cgtgggcacc		840
	_			tgactgcggc		900
agcagcgtgg	ttacttcttt	ctggacgagc	ggctctactg	tgagagccac	gccaaggcgc	960
gcgtgaagcc	gcccgagggc	tacgacgtgg	tggcggtgta	ccccaatgcc	aaggtggaac	1020
tcgtctgagc	tgggaccctg	ctcccacccc	tgcttcttaa	ggtccctgct	cggccggtgt	1080
aaatatgttt	caccctgtcc	ctctaataaa	gctcctctgc	tcaaaaaaaa		1130
<210> 982 <211> 1457 <212> DNA <213> Homo	o sapiens					
tecgttgetg	tcggcgcgcg	gcggcccggg	cgggggaagc	tggcgggctg	aggcgccccg	60
ctcttctcct	ctgccccggg	cccgcgaggc	cacgcgtcgc	cgcacgagag	atgatgcagg	120
acgtgtccag	ctcgccagtc	tcgccggccg	acgacagcct	gagcaacagc	gaggaagagc	180
cagaccggca	gcagccgccg	agcgcgaagc	gcggggcacg	caagcggcgc	agcagcaggc	240
gcagcgcggg	cggcggcgcg	gggcccggcg	gagccgcggg	tggggccgtc	ggaggcggcg	300
acgagccggg	cagcccggcc	cagggcaagc	gcggcaagaa	gtctgcgggc	tgtggcggcg	360
gcggcggcgc	gggcggcggc	ggcggcggcg	gcggcggcag	cagcagcggc	ggcgggagtc	420
cgcagtctta	cgaggagctg	cagacgcagc	gggtcatggc	caacgtgcgg	gagcgccagc	480
gcacccagtc	gctgaacgag	gcgttcgccg	cgctgcggaa	gatcatcccc	acgctgccct	540
_				caggtacatc		600
				aagctgcagc		660
				gggggcctgg		720
				, ,		

```
cgtcccacta gcagcggagc ccccacccc ctcagcaggg ccggagacct agatgtcatt
                                                                     780
                                                                     840
gtttccagag aaggagaaaa tggacagtct agagactctg gagctggata actaaaaata
                                                                     900
aaaatatatq ccaaagattt tcttggaaat tagaagagca aaatccaaat tcaaagaaac
agggcgtggg gcgcactttt aaaagagaaa gcgagacagg cccgtggaca gtgattccca
                                                                     960
                                                                    1020
gacgggcagc gcaccatcct cacatcctct gcattctgat agaagtctga acagttgttt
                                                                    1080
gtgttttttt tttttttt ttgacgaaga atgtttttat ttttatttt ttcatgcatg
cattctcaag aggtcgtgcc aatcatcagc cactgaaagg aaaggcatca ctatggactt
                                                                    1140
tctctatttt aaaatggtaa caatcagagg aactataaga acacctttag aaataaaaat
                                                                    1200
actgggatca aactggcctg caaaaccata gtcagttaat tctttttttc atccttcctc
                                                                    1260
1320
ggacccatgg taaatgcaat agtccggtgt ctaaatgcat tcatattttt atgattgttt
                                                                    1380
tgtaaatatc tttgtatatt tttctgcaat aaataaatat aaaaaattta gagaaaaaaa
                                                                    1440
                                                                    1457
aaaaaaaaa aaaaaaa
      983
1296
DNA
Homo sapiens
<400> 983 ccggcgcctg ggttggcgct gcggggcgga ggcggtgtct gagcgccgct ccggctctgc
                                                                      60
                                                                     120
tetetetega getteggeac cegecegage egetegegeg ceegecacet gtetgeceae
toggotgtot gtotgocoto cogoogocag ctootgooto gggootgooc totooggtot
                                                                     180
cggtgctccg aggggcgacg agaagcgcga cggggccgtg gcgcaccggg cagggcgcgc
                                                                     240
ggggcgcacg gcctggggc gcacggtgcg gcgccggccc atgaggcttt ccagcgcggg
                                                                     300
gageggeage geeggeegge catggggggt ageetgeggg tggeegttet aggegeeeeg
                                                                     360
                                                                     420
ggcqtgggca agacggccat catccgccag ttcctgttcg gtgactaccc cgagcgccac
cggcccacgg acgggccgcg cctctaccga cccgcggtgc tgctcgacgg cgccgtctac
                                                                     480
gacttgagca teegegaegg egacgteget ggeeeegget egageeeegg gggteeggag
                                                                     540
                                                                     600
gagtggccag acgctaagga ctggagcttg caggacacgg acgccttcgt gctcgtctac
gacatetgea geceggacag tttegactae gtgaaggeee tgeggeageg categeggag
                                                                     660
accaggcegg egggegece egaagegeee atcetegtgg taggcaacaa gegggacagg
                                                                     720
                                                                     780
cageggetge getteggace geggegegeg etggeegece tagtgegeag gggetggege
                                                                     840
tgcggctacc tcgagtgctc cgccaagtac aactggcacg tgctgcgtct cttccgcgag
                                                                     900
ctgctgcgct gcgctctggt gcgcgcgcgc cctgcacacc cggccctgcg cctgcagggg
                                                                     960
gegetgeate eegegegetg cageeteatg tgaceegate ggacagtgee atecatggge
                                                                    1020
eccaecttgt gaetgggaea ateagggaee tggattggae gggategeee aactteaetg
                                                                    1080
ggactggaca gggaagtete egecetgatt ggatgaggaa agetecaaec cagteteeta
agcgactggc ccccttttga acctcattgg acccaaccag gtcccaagct ccattggaga
                                                                    1140
                                                                    1200
tgaccagtcc tttctgggac ctcaatgggt cacaatccca ttggatggaa aggacttggc
tatgaacttg actggaaaca cgcagcctgc tectggaget teactggaca tattetttat
                                                                    1260
gccacaccta ccacgggata ataaaaggga aaataa
                                                                    1296
       984
838
DNA
Homo sapiens
                                                                      60
gaatteegga gtttteatee ageeaeggge eageatgtet gggggeaaat aegtagaete
                                                                     120
ggagggacat ctctacaccg ttcccatccg ggaacagggc aacatctaca agcccaacaa
caaggccatg gcagacgagc tgagcgagaa gcaagtgtac gacgcgcaca ccaaggagat
                                                                     180
                                                                     240
cgacctggtc aaccgcgacc ctaaacacct caacgatgac gtggtcaaga ttgactttga
```

agatgtgatt gcagaaccag aagggacaca cagttttcac ggcatttgga aggccagctt

caccaccttc actgtgacga	aatactggtt	ttaccgcttg	ctgtctgccc	tctttggcat	360
cccgatggca ctcatctggg	gcatttactt	cgccattctc	tctttcctgc	acatctgggc	420
agttgtacca tgcattaaga	gcttcctgat	tgagattcag	tgcaccagcc	gtgtctattc	480
catctacgtc cacaccgtct	gtgacccact	ctttgaagct	gttgggaaaa	tattcagcaa	540
tgtccgcatc aacttgcaga	aagaaatata	aatgacattt	caaggataga	agtatacctg	600
attttttttc cttttaattt					660
acgaatttat gaattgaatt					720
taagtattat gtctcttctg					780
ccatttatat ttctttcctt					838
<210> 985 <211> 3360 <212> DNA <213> Homo sapiens					
<400> 985 gaattccggc tgtgccgcac	cgaggcgagc	aggagcaggg	aacaggtgtt	taaaattatc	60
caactgccat agagctaaat	tcttttttgg	aaaattgaac	cgaacttcta	ctgaatacaa	120
gatgaaaatg tggttgctgg	tcagtcatct	tgtgataata	tctattacta	cctgtttagc	180
agagtttaca tggtatagaa	gatatggtca	tggagtttct	gaggaagaca	aaggatttgg	240
accaattttt gaagagcagc	caatcaatac	catttatcca	gaggaatcac	tggaaggaaa	300
agtctcactc aactgtaggg	cacgagccag	ccctttcccg	gtttacaaat	ggagaatgaa	360
taatggggac gttgatctca	caagtgatcg	atacagtatg	gtaggaggaa	accttgttat	420
caacaaccct gacaaacaga	aagatgctgg	aatatactac	tgtttagcat	ctaataacta	480
cgggatggtc agaagcactg	aagcaaccct	gagctttgga	tatcttgatc	ctttcccacc	540
tgaggaacgt cctgaggtca	gagtaaaaga	agggaaagga	atggtgcttc	tctgtgaccc	600
cccataccat tttccagatg	atcttagcta	tcgctggctt	ctaaatgaat	ttcctgtatt	660
tatcacaatg gataaacggc	gatttgtgtc	tcagacaaat	ggcaatctct	acattgcaaa	720
tgttgaggct tccgacaaag	gcaattattc	ctgctttgtt	tccagtcctt	ctattacaaa	780
gagcgtgttc agcaaattca	tcccactcat	tccaatacct	gaacgaacaa	caaaaccata	840
tcctgctgat attgtagttc	agttcaagga	tgtatatgca	ttgatgggcc	aaaatgtgac	900
cttagaatgt tttgcacttg	gaaatcctgt	tccggatatc	cgatggcgga	aggttctaga	960
accaatgcca agcactgctg	agattagcac	ctctggggct	gttcttaaga	tcttcaatat	1020
tcagctagaa gatgaaggca	tctatgaatg	tgaggctgag	aacattagag	gaaaggataa	1080
acatcaagca agaatttatg	ttcaagcatt	ccctgagtgg	gtagaacaca	tcaatgacac	1140
agaggtggac ataggcagtg	atctctactg	gccttgtgtg	gccacaggaa	agcccatccc	1200
tacaatccga tggttgaaaa	atggatatgc	gtatcataaa	ggggaattaa	gactgtatga	1260
tgtgactttt gaaaatgccg	gaatgtatca	gtgcatagct	gaaaacacat	atggagccat	1320
ttatgcaaat gctgagttga	agatcttggc	gttggctcca	acttttgaaa	tgaatcctat	1380
gaagaaaaag atcctggctg	ctaaaggtgg	aagggtgata	attgaatgca	aacctaaagc	1440
tgcaccgaaa ccaaagtttt	catggagtaa	agggacagag	tggcttgtca	atagcagcag	1500
aatactcatt tgggaagatg	gtagcttgga	aatcaacaac	attacaagga	atgatggagg	1560
tatctataca tgctttgcag	aaaataacag	agggaaagct	aatagcactg	gaacccttgt	1620
tatcacagat cctacgcgaa	ttatattggc	cccaattaat	gccgatatca	cagttggaga	1680
aaacgccacc atgcagtgtg	ctgcgtcctt	tgatcctgcc	ttggatctca	catttgtttg	1740
gtccttcaat ggctatgtga					1800
tatgctggat tccaatgggg					1860
atacacatgc actgcccaga					1920
gagaggccct ccaggccctc					1980
ggcacttact tggagccgtg					2040
gaccaagact attctttcag	atgactggaa	agatgcaaag	acagatcccc	caattattga	2100

```
2160
aqqaaatatq gaggcagcaa gagcagtgga cttaatccca tggatggagt atgaattccg
cgtggtagca accaatacac tgggtagagg agagcccagt ataccatcta acagaattaa
                                                                     2220
                                                                     2280
aacagacggt gctgcaccaa atgtggctcc ttcagatgta ggaggtggag gtggaagaaa
cagagagetg accataacat gggegeettt gteaagagaa taccactatg geaacaattt
                                                                     2340
                                                                     2400
tggttacata gtggcattta agccatttga tggagaagaa tggaaaaaag tcacagttac
                                                                     2460
taatcctgat actggccgat atgtccataa agatgaaacc atgagccctt ccactgcatt
tcaagttaaa gtcaaggcct tcaacaacaa aggagatgga ccttacagcc tactagcagt
                                                                     2520
                                                                     2580
cattaattca qcacaagacg ctcccagtga agccccaaca gaagtaggtg taaaagtctt
                                                                     2640
atcatcttct gagatatctg ttcattggga acatgtttta gaaaaaatag tggaaagcta
                                                                     2700
tcaqattcqq tattgggctg cccatgacaa agaagaagct gcaaacagag ttcaagtcac
                                                                     2760
cagccaagag tactcggcca ggctcgagaa ccttctgcca gacacccagt attttataga
                                                                     2820
agteggggce tgcaatagtg cagggtgtgg acctecaagt gacatgattg aggettteac
caagaaagca cctcctagcc agcctccaag gatcatcagt tcagtaaggt ctggttcacg
                                                                     2880
                                                                     2940
ctatataatc acctgggatc atgtcgttgc actatcaaat gaatctacag tgacgggata
taaggtactc tacagacctg atggccagca tgatggcaag ctgtattcaa ctcacaaaca
                                                                     3000
                                                                     3060
ctccatagaa gtcccaatcc ccagagatgg agaatacgtt gtggaggttc gcgcgcacag
tgatggagga gatggagtgg tgtctcaagt caaaatttca ggtgcaccca ccctatcccc
                                                                     3120
aagtettete ggettaetge tgeetgeett tggeateett gtetaettgg aattetgaat
                                                                     3180
                                                                     3240
gtgttgtgac agctgctgtt cccatcccag ctcagaagac acccttcaac cctgggatga
                                                                     3300
ccacaattcc ttccaatttc tgcggctcca tcctaagcca aataaattat actttaacaa
actattcaac tgatttacaa cacacatgat gactgaggca ttcaggaacc ccttcatcca
                                                                     3360
       986
4037
DNA
Homo sapiens
<400> 986
gageteegtt gggagteeca tgtttettta tggcataatg ggtgagaaca cagaettgga
                                                                        60
                                                                      120
agccaaacca cctgaatttg aaccccagtt ccatttacca actgtcaaaa gcttaggctt
tgattctaag cctgtttcct caactgctgt tctaaagatt aaataggcta atattcataa
                                                                      180
                                                                       240
ggcaactggg acagtggctt gtgtgtatag caaccattat ataagtgaat tatctactga
gcaccacagc acttetteac tecatggtgt ggtgaccaga atggagatga gacagagaac
                                                                      300
tgcaggttct gcttcgagtt taagttagga tttcccttga ccaatgagac ctgacttgga
                                                                      360
                                                                      420
ggagtcctgg cctcattcca ttaccccaaa caccctctag tctctagatg aacagatcct
gaatgtccag gcccacgtg gcctgttcta aggcctgaga tggaattgga tacaggacac
                                                                       480
                                                                       540
atccagcctt gagatctttt gctaagtgtg acacagtgcc cccagccctg tgctcatgtt
                                                                       600
catgcctagg gaaaggcttc tatcaaaaga gttgaacttc ttcccactgg ggatggaaga
                                                                       660
ccatttcctc ccttaaacct tggctctccc tgcttccttc aggccaccaa caacacatgt
gcaggatatg aaattgctga ggcatcactg ctttcctact tcccttccaa gtctcagctc
                                                                       720
ccttatttta aaaaatattt ggcctcaatg atcatttctc aacaattcct caccgcagga
                                                                       780
                                                                       840
qcctctqaag ctcccaccag gccagctctc ctcccacaac agcttcccac agcatgaaga
                                                                       900
teteegtgge tgecatteee ttetteetee teateaceat egecetaggg accaagactg
                                                                       960
aatceteete aegtgagtge aatgeettgt etteetteea aeetagagee tgeagggaaa
taagcaggag tgaggttggg gctcagggga agaccaggag cagggactca gaaaggaggg
                                                                      1020
ctqqtatctt cttqaaattq tgtgtatagc aacattatat aaatgaatta tctactgagc
                                                                      1080
accacagcac ttcaccccat ggtgtggtga gcaggatgga gatgagactt aggactgtag
                                                                      1140
gttctgctta agagtttaag ttgggatctt ccagccttga ccaatgagac ttgacttggg
                                                                      1200
                                                                      1260
agactccagg cttcattcca ctaccccaaa tgccctctag tctccaaata aacagatcct
                                                                      1320
gaateteeag geeteacatg geettgatet ettateattg eeececagga eeagteeece
cttgccctca aggacatgga gtgagaccag cctgcctctc tactccctca atttctctct
                                                                      1380
```

```
1440
ctttqccqct aagcaaaaga gtggcccacc ccatttgggg tatatttcct cagggagatt
aggagcagtg tettgagece etcaagggea tttttetatt ggeeteetga ggtttgggee
                                                                     1500
                                                                     1560
cagcetgett ccagegteac etgtgeecag tgagtgeage attgettggg tatgggetgg
ggggaaacac gacagtgtgg ggtccatcct aggccccctt ttctcagctg atttcttaga
                                                                     1620
ataagctgcc tttagagata accaaaacta tttatcactc ttccatttta cctactctcc
                                                                     1680
                                                                     1740
ttttcagaaa ctggggggaa accgaaggtt gttaaaatac agctaaagtt ggtgggtatg
tgcacagttt gacttgccct ctccgatgtc atttgtcagc tcagaggaac aaggtgggag
                                                                     1800
                                                                     1860
agtataggag ctctgactgg gtctcaggaa acaggggccc cttatgccgt tctttggatc
                                                                     1920
gtgaggatgc tgcctggaat ggagctggaa aacaggatga gacccttcca cccagacatc
                                                                     1980
tgqccaccct cagtgacctc tgaggccatt gtgatgcaca tccatgattc tatgaagcag
                                                                     2040
ggtcacataa catgcacaca cctgatttct ccactccata accacaacat gtgcctgttt
gtacagggct cttggcctac aatgtccttc ctgctacctc tataattcaa gcttggggtg
                                                                     2100
gctgctgtca ccttgcttct cctataaaag ccatgaaact tctcaatcag aaaatagatg
                                                                     2160
                                                                     2220
aaaaaatcac ccaatccagt gatttttaaa actttttaga ccacaaaacc ttttcttcaa
qcaatatctt ccacagaggc ccaatatgta aaacagaaaa aatgggttga gtagggtaca
                                                                     2280
                                                                     2340
agacaccact ctcaaatqca qcaaggcctc cacaatagtc cctgaggccc ccagagctca
                                                                     2400
qtqtaaaaac cactgatgca gtccaagggc ctcatttaca gaggagggaa cagggggaaa
gtaaaatggc cacagtacac aggaagcaca ggcaaggtta ggttaggatt tgggtgccct
                                                                     2460
gactctgtgg cctttgtcct tggggcttgc tgtgggcatc ctgctctctc tgcaggttgt
                                                                     2520
                                                                     2580
cggttcaatg gggacatggg cagggtggag cactaggagg ggctgggttt gcattcccaa
atggcatgtc tccaaatccc tattgggatt tcttccaaat attcctccta tttggagcac
                                                                     2640
                                                                     2700
ctttcccgaa taaggcatga aggctgcatg atattggcca agtccctagc cttctctgcc
                                                                     2760
agtcggcccc cagagatggt gtaagaagat ctgagtgtgc tgctcttcaa tcctggagtt
                                                                     2820
gaaagtcatc caccagtctt tccaagaggg gttgaagaaa aggaggaagg gtgattgatg
                                                                     2880
atgagggagg agaaaaagaa gagcccagga gtaccatgga gaaggagaag agaagatgag
                                                                     2940
gaaageetae teteceetee aagttetgag gggetgtete eteetteett eeeteeteea
tgccctcagc ttgcaggagc agccaatggt atggccttta acaaggggcc cctcctcagc
                                                                     3000
atctgatgct ctctcctcag ggggacctta ccacccctca gagtgctgct tcacctacac
                                                                     3060
                                                                     3120
tacctacaag atcccgcgtc agcggattat ggattactat gagaccaaca gccagtgctc
                                                                     3180
caagcccgga attgtgtagg tggtacacac acatcacact ggggggagag ggagccagca
gggcctcctg gagggaagca gggagtggtg gtggaatggg gacccccagc gtacctccca
                                                                     3240
                                                                     3300
ggtgtgacta catggggaga ggcagctgag gggcaatctg agcgctttct ggctggagcc
tgcaggagcc atggggaaac tgaccccatg gatggggaga tgacagagaa gggagaagaa
                                                                     3360
                                                                     3420
ggcaagaggg cacttcctca gggggacaca gagactagat gggtctaggg gtcctaggaa
ccgaagagta tgtctcagag aggagactgg ctctaagctg cctctgtgga agaaaggaaa
                                                                     3480
                                                                     3540
agcagtatag gtcaggtggg gaatttagga gggagggaag atgggctgtc tcttccggcc
actgggcccc tcggtttgtg atccttctcc ctcttgctcc acagcttcat caccaaaagg
                                                                     3600
                                                                     3660
ggccattccg tctgtaccaa ccccagtgac aagtgggtcc aggactatat caaggacatg
                                                                     3720
aaggagaact gagtgaccca gaaggggtgg cgaaggcaca gctcagagac ataaagagaa
gatgccaagg cccctcctc cacccaccgc taactctcag ccccagtcac cctcttggag
                                                                     3780
                                                                     3840
cttccctgct ttgaattaaa gaccactcat gctcttccct ggcctcattc ctttctacgg
gatttactca ttggccatgc actgaggaca ccagggtgtg gcaccctcgg catcaagcct
                                                                     3900
                                                                     3960
cgctctgcag aagttttggt ggagcctggt acaaaaaata ggtcaggcct gcaatgcagg
tagtgagaag cagaaagtga gaaagaaaag cagtgtaaag accgtctcct cctcagcagc
                                                                     4020
                                                                     4037
aacagtagca gaccccg
```

<210> 987 <211> 3426 <212> DNA

<213> Homo sapiens

<400> 987	cagcgccaac	aattacaaaa	cccaadaadc	cateeteeea	aggaaaatgg	60
	cctgtgcgga					120
	aaaagtccaa					180
-	ttcacacacg					240
_	gctccacccc			-		300
	cctcaccagt					360
	ggatcttctt					420
=	ggagaccttg					480
	ggccctgagc					540
acctcagccc	tgggtgctga	ggccttgaag	gtcactcttc	ctgcaaggac	tacgttaagg	600
gaaggaactc	tggcttccag	gtatctccag	gattgaagag	cattgcatgg	acacccctta	660
tccaggactc	tgtcaatttc	cctgactcct	ctaagccact	cttccaaagg	cataagaccc	720
taagcctcct	tttgcttgaa	accaaagata	tatacacagg	atcctattct	caccaggaag	780
ggggtccacc	cagcaaagag	tgggctgcat	ctgggattcc	caccaaggtc	ttcagccatc	840
aacaagagtt	gtcttgtccc	ctcttgaccc	atctccccct	cactgaatgc	ctcaatgtga	900
ccaggggtga	tttcagagag	ggcagagggg	taggcagagc	ctttggatga	ccagaacaag	960
gttccctctg	agaattccaa	ggagttccat	gaagaccaca	tccacacacg	caggaactcc	1020
cagcaacaca	agctggaagc	acatgtttat	ttattctgca	ttttattctg	gatggatttg	1080
aagcaaagca	ccagcttctc	caggctcttt	ggggtcagcc	agggccaggg	gtctccctgg	1140
	ccaatcccat					1200
	tcatctgagc					1260
	tttctactgt					1320
	ccaaggacca					1380
	acccaggggt					1440
	aacatttgtg					1500
	cttaggatgt					1560
	cccctggaga					1620 1680
	tgcttcaaat taagctctgg					1740
	cacactggtg					1800
	agggttgatc					1860
	aaattgtagt					1920
	gggggttttt					1980
	agcactgcta					2040
	ggaggtcaca					2100
	tgtttttgct					2160
tcaaagcagt	taactttaag	actgagcacc	tgcttcatgc	tcagccctga	ctggtgctat	2220
aggctggaga	agctcaccca	ataaacatta	agattgaggc	ctgccctcag	ggatcttgcg	2280
ttcccagtgg	tcaaaccgca	ctcacccatg	tgccaaggtg	gggtatttac	cacagcagct	2340
gaacagccaa	atgcatggtg	cagttgacag	caggtgggaa	atggtatgag	ctgagggggg	2400
ccgtgcccag	gggcccacag	ggaaccctgc	ttgcactttg	taacatgttt	acttttcagg	2460
gcatcttagc	ttctattata	gccacatccc	tttgaaacaa	gataactgag	aatttaaaaa	2520
	cataagacca					2580
	cccagagcat					2640
	tggaaaagag					2700
	agagaagcct					2760
aagtgtgagc	agtgagttac	agcgagaggc	agagaaagaa	gagacaggag	ggcaagggcc	2820

atgctgaagg	gaccttgaag	ggtaaagaag	tttgatatta	aaggagttaa	gagtagcaag	2880
ttctagagaa	gaggctggtg	ctgtggccag	ggtgagagct	gctctggaaa	atgtgaccca	2940
gatcctcaca	accacctaat	caggctgagg	tgtcttaagc	cttttgctca	caaaacctgg	3000
cacaatggct	aattcccaga	gtgtgaaact	tcctaagtat	aaatggttgt	ctgtttttgt	3060
aacttaaaaa	aaaaaaaaa	agtttggccg	ggtgcggtgg	ctcacgcctg	taatcccagc	3120
actttgggag	gccaaggtgg	ggggatcaca	aggtcactag	atggcgagca	tcctggccaa	3180
				ctgagcgtgg		3240
				gcttaaacct		3300
gagtacagtg						3360
				tctaaataaa		3420
cccctg						3426
•						
<210> 988 <211> 3388 <212> DNA <213> Homo	sapiens					
<400> 988	aggtagtaga	ggaagaggtg	caddcadada	cagagctgta	tgcagaggct.	60
				tggaggagat		120
				agctacaggc		180
				aggaggagga		240
				tcaagaaact		300
				aacgaaaact		360
				aaaaggccaa		420
				aagtgcggct		480
				tggagggtga		540
				agctcaagat		600
				acgatgaaat		660
				tctcagacct		720
				agaagcgaga		780
				acagcacagc		840
				agaaggccct		900
				aacacgcaca		960
				cgaacctaga		1020
cagacgctgg	agaaagagaa	cgcagacctg	gccggggagc	tgcgggtcct	gggccaggcc	1080
aagcaggagg	tggaacataa	gaagaagaag	ctggaggcgc	aggtgcagga	gctgcagtcc	1140
aagtgcagcg	atggggagcg	ggcccgggcg	gagctcaatg	acaaagtcca	caagctgcag	1200
aatgaagttg	agagcgtcac	agggatgctt	aacgaggccg	aggggaaggc	cattaagctg	1260
gccaaggacg	tggcgtccct	cagttcccag	ctccaggaca	cccaggagtt	gcttcaagaa	1320
gaaacccggc	agaagctcaa	cgtgtctacg	aagctgcgcc	agctggagga	ggagcggaac	1380
agcctgcaag	accagctgga	cgaggagatg	gaggccaagc	agaacctgga	gcgccacatc	1440
tccactctca	acatccagct	ctccgactcg	aagaagaagc	tgcaggactt	tgccagcacc	1500
				agatcgagaa		1560
cagtacgagg	agaaggcggc	cgcttatgat	aaactggaaa	agaccaagaa	caggcttcag	1620
				ggcaactcgt		1680
- '				agaaaaacat		1740
				agaaggaaac		1800
				aggaactcga		1860
aaaatgctca	aagccgaaat	ggaagacctg	gtcagctcca	aggatgacgt	gggcaagaac	1920

gtccatgagc tggagaagtc caagcgggcc ctggagaccc agatggagga gatgaagacg

```
cagctggaag agctggagga cgagctgcaa gcctcggagg acgccaaact gcggctggaa
                                                                   2040
gtcaacatgc aggcgctcaa gggccagttc gaaagggatc tccaagcccg ggacgagcag
                                                                   2100
aatgaggaga agaggaggca actgcagaga cagcttcacg agtatgagac ggaactggaa
                                                                   2160
gacgagcgaa acgaacgtgc cctggcagct gcagcaaaga agaagctgga aggggacctg
                                                                   2220
                                                                    2280
aaagacctgg agettcagge egactetgee atcaagggga gggaggaage catcaagcag
                                                                    2340
ctacgcaaac tgcaggctca gatgaaggac tttcaaagag agctggaaga tgcccgtgcc
                                                                    2400
tccagagatg agatctttgc cacagccaaa gagaatgaga agaaagccaa gagcttggaa
                                                                    2460
gcagacetea tgcagetaca agaggacete geegeegetg agagggeteg caaacaageg
gacctcgaga aggaggaact ggcagaggag ctggccagta gcctgtcggg aaggaacgca
                                                                    2520
                                                                    2580
ctccaggacg agaagcgccg cctggaggcc cggatcgccc agctggagga ggagctggag
gaggagcagg gcaacatgga ggccatgagc gaccgggtcc gcaaagccac acagcaggcc
                                                                    2640
gagcagctca gcaacgagct ggccacagag cgcagcacgg cccagaagaa tgagagtgcc
                                                                    2700
                                                                    2760
cggcagcagc tcgagcggca gaacaaggag ctccggagca agctccacga gatggagggg
                                                                    2820
gccgtcaagt ccaagttcaa gtccaccatc gcggcgctgg aggccaagat tgcacagctg
gaggagcagg tegagcagga ggecagagag aaacaggcag ccaccaagte getgaagcag
                                                                    2880
                                                                    2940
aaagacaaga agctgaagga aatcttgctg caggtggagg acgagcgcaa gatggccgag
                                                                    3000
cagtacaagg agcaggcaga gaaaggcaat gccagggtca agcagctcaa gaggcagctg
gaggaggcag aggaggagtc ccagcgcatc aacgccaacc gcaggaagct gcagcgggag
                                                                    3060
                                                                    3120
ctggatgagg ccacggagag caacgaggcc atgggccgtg aggtgaacgc actcaagagc
                                                                    3180
aageteagag ggeeeeece acaggaaaet tegeagtgat geaceaggeg aggaaaegag
acctctttcg ttccttctag aaggtctgga ggacgtagag ttattgaaaa tgcagatggt
                                                                    3240
tctgaggagg aactggacac tcgagacgca gacttcaatg gaaccaaggc cagtgaataa
                                                                    3300
3360
                                                                    3388
aaaaacccaa caacaacccg aacaagac
       Homo sapiens
tgggaggagg tggattccag ccccagccc cagggctctg aatcgctgcc agctcagccc
                                                                      60
cctgcccagc ctgccccaca gcctgagccc cagcaggcca gagagcccag tcctgaggtg
                                                                     120
agetgetgtg geetgtggee aggegaeeee agegeteeea gaaetgagge tggeageeag
                                                                     180
                                                                     240
ccccagcctc agccccaact gcgaggcaga gagacaccaa tgggaatccc aatggggaag
tegatgetgg tgetteteae ettettggee ttegeetegt getgeattge tgettaeege
                                                                     300
                                                                     360
cccagtgaga ccctgtgcgg cggggagctg gtggacaccc tccagttcgt ctgtggggac
egeggettet aetteagega ettecagagg eeegeaagee gtgtgageeg tegeageegt
                                                                     420
                                                                     480
qqcatcqttq aqqaqtqctq tttccqcagc tgtqacctqq ccctcctqqa gacqtactqt
gctacccccg ccaagtccga gagggacgtg tcgaccctc cgaccgtgct tccggacaac
                                                                     540
ttccccagat accccgtggg caagttcttc caatatgaca cctggaagca gtccacccag
                                                                     600
                                                                     660
egectgegea ggggeetgee tgeeeteetg egtgeeegee ggggteaegt getegeeaag
gagetegagg egtteaggga ggeeaaaegt cacegteece tgattgetet acceaeceaa
                                                                     720
                                                                     780
gaccccgccc acgggggcgc ccccccagag atggccagca atcggaagtg agcaaaactg
cegeaagtet geageegge gecaecatee tgeageetee teetgaeeae ggaegtttee
                                                                     840
atcaggttcc atcc
                                                                     854
       990
1025
      DNA
Homo sapiens
<400> 990
gtcccgagcg cgagcggaga cgatgcagcg gagactggtt cagcagtgga gcgtcgcggt
                                                                      60
```

gttcctgctg agctacgcgg	taccetecta	caaacactca	gtggagggtc	tcagccgccg	120
cctcaaaaga gctgtgtctg					180
tttacggcga cgattcttcc					240
agctacctcg gaggtgtccc					300
ccgatttggg tctgatgatg					360
gtacaaagag cagccgctca					420
caaggagcag gaaaagaaaa					480
tgggagtggg ctagaagggg					540
ttcacggagg cattgaaatt					600
aatagtgaac atatggaaag					660
tggaataaaa ctgtctccc					720
tttttttttg ccaaggctaa					780
cattgatgta tttattttgt					840
acataatgca ctttagatat					900
ctattttgtg gttgatttta					960
gtgcatgtaa aaataacagt					1020
attac		_			1025
<210> 991 <211> 655 <212> DNA					
<212> DNA <213> Homo sapiens					
<400> 991	~~~		t.a.t.a.a.t	attattata	60
ccaatggcca ttagccttca					60 120
tcttccagac cacctcgaga					180
aggacaggat gagggtgcctg					240
gacctgctga gccccatcac					300
caaggaacag acagtgagca					360
cacggtgata aagtccgggg					420
gggccccatg ctggcctgcc					480
cagcetetet gttgeeteag tgggaettta ggeatgatta					540
tttttagcct tccacaacta					600
tccagggcgg gggctttaag	_		_	_	655
cccagggcgg gggccccaag	geeaggagae	cccccaage	aggeaceace	aggeg	0,00
<210> 992 <211> 2130 <212> DNA					
<212> DNA <213> Homo sapiens					
<400> 992 gcgcccaggt agctgcgagg	aaacttttgc	agcggctggg	tagcagcacg	tctcttgctc	60
ctcagggcca ctgccaggct	tgccgagtcc	tgggactgct	ctcgctccgg	ctgccactct	120
cccgcgctct cctagctccc	tgcgaagcag	gatggccggg	accgtgcgca	ccgcgtgctt	180
ggtggtggcg atgctgctca	gcttggactt	cccgggacag	gcgcagcccc	cgccgccgcc	240
gccggacgcc acctgtcacc	aagtccgctc	cttcttccag	agactgcagc	ccggactcaa	300
gtgggtgcca gaaactcccg	tgccaggatc	agatttgcaa	gtatgtctcc	ctaagggccc	360
aacatgctgc tcaagaaaga	tggaagaaaa	ataccaacta	acagcacgat	tgaacatgga	420
acagctgctt cagtctgcaa	gtatggagct	caagttctta	attattcaga	atgctgcggt	480
tttccaagag gcctttgaaa	ttgttgttcg	ccatgccaag	aactacacca	atgccatgtt	540
caagaacaac tacccaagcc	tgactccaca	agcttttgag	tttgtgggtg	aatttttcac	600
agatgtgtct ctctacatct	tgggttctga	catcaatgta	gatgacatgg	tcaatgaatt	660
gtttgacagc ctgtttccag	tcatctatac	ccagctaatg	aacccaggcc	tgcctgattc	720
agccttggac atcaatgagt	gcctccgagg	agcaagacgt	gacctgaaag	tatttgggaa	780

tttccccaag	cttattatga	cccaggtttc	caagtcactg	caagtcacta	ggatcttcct	840
tcaggctctg	aatcttggaa	ttgaagtgat	caacacaact	gatcacctga	agttcagtaa	900
ggactgtggc	cgaatgctca	ccagaatgtg	gtactgctct	tactgccagg	gactgatgat	960
ggttaaaccc	tgtggcggtt	actgcaatgt	ggtcatgcaa	ggctgtatgg	caggtgtggt	1020
ggagattgac	aagtactgga	gagaatacat	tctgtccctt	gaagaacttg	tgaatggcat	1080
gtacagaatc	tatgacatgg	agaacgtact	gcttggtctc	ttttcaacaa	tccatgattc	1140
tatccagtat	gtccagaaga	atgcaggaaa	gctgaccacc	actattggca	agttatgtgc	1200
ccattctcaa	caacgccaat	atagatctgc	ttattatcct	gaagatctct	ttattgacaa	1260
gaaagtatta	aaagttgctc	atgtagaaca	tgaagaaacc	ttatccagcc	gaagaaggga	1320
	aagttgaagt					1380
cagccatagc	cctgtggcgg	aaaacgacac	cctttgctgg	aatggacaag	aactcgtgga	1440
gagatacagc	caaaaggcag	caaggaatgg	aatgaaaaac	cagttcaatc	tccatgagct	1500
	ggccctgagc					1560
ccagctcctg	agaaccatgt	ctatgcccaa	aggtagagtt	ctggataaaa	acctggatga	1620
	gaaagtggag					1680
tgatggaatg	ataaaagtga	agaatcagct	ccgcttcctt	gcagaactgg	cctatgatct	1740
	gatgcgcctg					1800
	aacctcggga					1860
	tgcttcttct					1920
ccctacagca	ccctgtggtc	ttcctcgata	aagggaacca	ctttcttatt	tttttctatt	1980
tttttttt	tgttatcctg	tatacctcct	ccagccatga	agtagaggac	taaccatgtg	2040
ttatgttttc	gaaaatcaaa	tggtatcttt	tggaggaaga	tacattttag	tggtagcata	2100
tagattgtcc	ttttgcaaaa	aaaaaaaccg				2130
<400> 993	sapiens					
gggaagcatg	gggcttccca					60
	gcgggtgtgc					120
	agcacagccc					180
	tggttttctg					240
	cagagcgaac					300
	gccctgactc					360
	cggtcccagg					420
	caggtcaacc					480
	gtagggagga					540
	aaggaggaga					600
	tacaccttgc					660
	tactgtgagc					720
	accgtccctg					780
	ctgaaggaag					840
	ttcagcatca					900
	aacggggtcc					960
cgaatgtcag	gcctggaact					1020
			LACLECTOR'S	GCCCCCTOAGA	uacaudaadd	1080
actggtgaac						
cagcagcctc	accctgacct	gtgaggcaga	gagtagccag	gacctcgagt	tccagtggct	1140
cagcagcctc gagagaagag	accctgacct acagaccagg	gtgaggcaga tgctggaaag	gagtagccag ggggcctgtg	gacctcgagt cttcagttgc	tccagtggct atgacctgaa	1140 1200
cagcagcctc gagagaagag	accctgacct	gtgaggcaga tgctggaaag	gagtagccag ggggcctgtg	gacctcgagt cttcagttgc	tccagtggct atgacctgaa	1140

```
ccgcacacag ctggtcaagc tggccatttt tggcccccct tggatggcat tcaaggagag
                                                                     1320
gaaggtgtgg gtgaaagaga atatggtgtt gaatctgtct tgtgaagcgt cagggcaccc
                                                                     1380
                                                                     1440
ccggcccacc atctcctgga acgtcaacgg cacggcaagt gaacaagacc aagatccaca
gcgagtcctg agcaccctga atgtcctcgt gaccccggag ctgttggaga caggtgttga
                                                                     1500
atgcacggcc tccaacgacc tgggcaaaaa caccagcatc ctcttcctgg agctggtcaa
                                                                     1560
tttaaccacc ctcacaccag actccaacac aaccactggc ctcagcactt ccactgccag
                                                                     1620
                                                                     1680
tcctcatacc agagccaaca gcacctccac agagagaaag ctgccggagc cggagagccg
                                                                     1740
gggcgtggtc atcgtggctg tgattgtgtg catcctggtc ctggcggtgc tgggcgctgt
                                                                     1800
cctctatttc ctctataaga agggcaaget gccgtgcagg cgctcaggga agcaggagat
cacgctgccc ccgtctcgta agaccgaact tgtagttgaa gttaagtcag ataagctccc
                                                                     1860
agaagagatg ggcctcctgc agggcagcag cggtgacaag agggctccgg gagaccaggg
                                                                     1920
agagaaatac atcgatctga ggcattagcc ccgaatcact tcagctccct tccctgcctg
                                                                     1980
                                                                     2040
gaccattccc agetecetge teactettet etcagecaaa geteaaaggg actagagaga
                                                                     2100
agectectge teccetegee tgeacacece ettteagagg gecaetgggt taggacetga
ggacctcact tggccctgca aggcccgctt ttcagggacc agtccaccac catctcctcc
                                                                     2160
                                                                     2220
acqttqaqtq aagctcatcc caagcaagga gccccagtct cccgagcggg taggagagtt
                                                                     2280
tcttgcagaa cgtgtttttt ctttacacac attatgctgt aaatacgctc gtcctgccag
                                                                     2340
caqctqaqct gggtagcctc tctgagctgg tttcctgccc caaaggctgg cattccacca
                                                                     2400
tecaggtgea ceactgaagt gaggacaeae eggageeagg egeetgetea tgttgaagtg
                                                                     2460
eqetqtteae accegeteeg gagageacce cageageate cagaageage tgeagtgeaa
gcttgcatgc ctgcgtgttg ctgcaccacc ctcctgtctg cctcttcaaa gtctcctgtg
                                                                     2520
                                                                     2580
acattttttc tttggtcaga ggccaggaac tgtgtcattc cttaaagata cgtgccgggg
ccaggtgtgg ctcacgcctg taatcccagc actttgggag gccgaggcgg cggatcacaa
                                                                     2640
                                                                     2700
aqtcaqacqa gaccatcctg gctaacacgg tgaaaccctg tctctactaa aaatacaaaa
aaaaattagc taggcgtagt ggttggcacc tatagtccca gctactcgga aggctgaagc
                                                                     2760
                                                                     2820
aggaqaatgg tatgaatcca ggaggtggag cttgcagtga gccgagaccg tgccactgca
                                                                     2880
ctccaqcctg ggcaacacag cgagactccg tctcgagccg gccggttgcg cgggccctcg
                                                                     2940
gacceteaga gaggegaggg ttegagggea egagttegag gecaacetgg tecacatggg
                                                                     2943
ttg
       994
1340
DNA
       Homo sapiens
                                                                       60
gcaccoggca goggtotoag gocaagoooc otgocagcat ggccagogag ttcaagaaga
                                                                      120
agctcttctg gagggcagtg gtggccgagt tcctggccac gaccctcttt gtcttcatca
gcatcggttc tgccctgggc ttcaaatacc cggtggggaa caaccagacg gcggtccagg
                                                                      180
acaacgtgaa ggtgtcgctg gccttcgggc tgagcatcgc cacgctggcg cagagtgtgg
                                                                      240
gccacatcag cggcgcccac ctcaacccgg ctgtcacact ggggctgctg ctcagctgcc
                                                                      300
                                                                      360
agatcagcat cttccgtgcc ctcatgtaca tcatcgccca gtgcgtgggg gccatcgtcg
ccaccqccat cctctcaggc atcacctcct ccctgactgg gaactcgctt ggccgcaatg
                                                                      420
                                                                      480
acctggctga tggtgtgaac tcgggccagg gcctgggcat cgagatcatc gggaccctcc
                                                                      540
agctggtgct atgcgtgctg gctactaccg accggaggcg ccgtgacctt ggtggctcag
cccccttgc catcggcctc tctgtagccc ttggacacct cctggctatt gactacactg
                                                                      600
gctgtgggat taaccctgct cggtcctttg gctccgcggt gatcacacac aacttcagca
                                                                      660
                                                                      720
accactggat tttctgggtg gggccattca tcgggggagc cctggctgta ctcatctacg
                                                                      780
acttcatcct ggccccacgc agcagtgacc tcacagaccg cgtgaaggtg tggaccagcg
                                                                      840
qccaqqtgga ggagtatgac ctggatgccg acgacatcaa ctccagggtg gagatgaagc
                                                                      900
ccaaatagaa ggggtctggc ccgggcatcc acgtaggggg caggggcagg ggcgggcaga
```

gggaggggag gggtgaaatc	catactgtag	acactctgac	aagctggcca	aagtcacttc	960
cccaagatct gccagacctg	catggtcaag	cctcttatgg	gggtgtttct	atctctttct	1020
ttctctttct gtttcctggc	ctcagagctt	cctggggacc	aagatttacc	aattcaccca	1080
ctcccttgaa gttgtggagg	aggtgaaaga	aagggaccca	cctgctagtc	gcccctcaga	1140
gcatgatggg aggtgtgcca	gaaagtcccc	cctcgcccca	aagttgctca	ccgactcacc	1200
tgcgcaagtg cctgggattc	taccgtaatt	gctttgtgcc	tttgggcacg	gccctccttc	1260
ttttcctaac atgcaccttg	ctcccaatgg	tgcttggagg	gggaagagat	cccaggaggt	1320
gcagtggagg gggcaagctt					1340
<210> 995 <211> 2625 <212> DNA <213> Homo sapiens					
<400> 995 ggcagccgtc cggggccgcc	actctcctcq	geeggteeet	ggctcccgga	ggcggccgcg	60
cgtggatgcg gcgggagctg					120
cctatggctt gaagagcctg					180
ctgtcctggt atgatgatga					240
gacgggaagg cggacagacc					300
gctgtcatcg tcttcggcaa					360
cagaccacca ccaactacct					420
ctggtcatgc cctgggttgt	ctacctggag	gtggtaggtg	agtggaaatt	cagcaggatt	480
cactgtgaca tcttcgtcac					540
tgtgccatca gcatcgacag					600
tacagctcca agcgccgggt	caccgtcatg	atctccatcg	tctgggtcct	gtccttcacc	660
atctcctgcc cactcctctt	cggactcaat	aacgcagacc	agaacgagtg	catcattgcc	720
aacccggcct tcgtggtcta	ctcctccatc	gtctccttct	acgtgccctt	cattgtcacc	780
ctgctggtct acatcaagat	ctacattgtc	ctccgcagac	gccgcaagcg	agtcaacacc	840
aaacgcagca gccgagcttt	cagggcccac	ctgagggctc	cactaaaggg	caactgtact	900
caccccgagg acatgaaact	ctgcaccgtt	atcatgaagt	ctaatgggag	tttcccagtg	960
aacaggcgga gagtggaggc	tgcccggcga	gcccaggagc	tggagatgga	gatgctctcc	1020
agcaccagcc cacccgagag	gacccggtac	agccccatcc	cacccagcca	ccaccagctg	1080
actctccccg acccgtccca	ccacggtctc	cacagcactc	ctgacagccc	cgccaaacca	1140
gagaagaatg ggcatgccaa	agaccacccc	aagattgcca	agatctttga	gatccagacc	1200
atgcccaatg gcaaaacccg					1260
cagaaggaga agaaagccac					1320
tggctgccct tcttcatcac					1380
gtcctgtaca gcgccttcac					1440
tacaccacct tcaacattga					1500
tgctgcctgc ccgcacagca					1560
cttgcgaacc gtgagcagga					1620
tgcagtgttc gcttggctcc					1680
gtgctagtga gctgggcatg					1740
agagtccccc ctcccacctc					1800
cttgaccttc ctctggggct					1860
ttttctcttt gtggggcttg					1920
ctgcaaggcc cacaggaggc					1980
tgggagacca tgtaaatacc					2040
tageteete egeaceegat					2100
gttacagete eccaagtggt	ttccacatgc	cccyagaaga	ggageeetea	ccccgaaggg	2160

cccaggaggg tctatgggga	gaggaactcc	ttgcctagcc	caccctgctg	ccttctgacg	2220
gccctgcaat gtatcccttc	tcacagcaca	tgctgccagc	ctggggcctg	gcagggaggt	2280
caggccctgg aactctatct	gggcctgggc	taggggacat	cagaggttct	ttgagggact	2340
geetetgeea caetetgaeg	caaaaccact	ttccttttct	attccttctg	gcctttcctc	2400
teteetgttt ceetteeett					2460
gctgaaaacc atctgcctgg					2520
ggagagcccc tggggctaga					2580
ttgacgagtc accttccagg					2625
	555				
<210> 996 <211> 3128					
<212> DNA .					
<213> Homo sapiens					
<400> 996 ccttgtgcat ttggtctgaa	gacaaagatg	actgcaggag	tgggcaggcc	ggagtggggg	60
tgacctggcc tgtgccagga	aggaggagga	gtctgcagcc	ctgtgcggtt	caacatccat	120
caaggagtcc agagcaggag					180
taatctccca gccccgactc					240
tgctgtcgcc tccccgaagg					300
tgagtcagga gcattttctt					360
gaaaccaaca gcagtggctg					420
ccacctcaga caggcctgac					480
ccagttccac cctcagcttc					540
tatcccggca tgggtggggc					600
ggggtgtgga agggggaagc					660
cgaggccaca gcgacttcat					720
cttgggccaa gcctggaaga					780
cccctgggct tctcccacgc					840
gaggcccctg agcctcctga					900
ccagactcca tgcgcctctc					960
cagtatgagg acacgaacgg					1020
atcctcatct caggcctgga					1080
gaagggaagc gcctggggcc					1140
cagaceteag aggagteaag					1200
agttcactga ggctcaactg					1260
tttggggttc catcaccaag					1320
ctgatggtgc cggggacgcg					1380
tacagcctga cactgtatgg					1440
gcccgcaccc tcagcccagt					1500
gagaceteag ceaaggteaa					1560
tcctaccage tggcggacgg					1620
acccagaaac tccaggggct					1680
cgaggctttg aggagagtga					1740
acacagttgc gtgcactgaa					1800
cagaatcctg tggacaccta					1860
gcggagaccc caggcagcgc					1920
tacaccgcca cagtgcgtgg					1980
ttcaccacag ggctagaggc					2040
gccctgctca cttggactga					2100
acccctggtg gacagaacca					2160
	J	2000000000000	Jacourono	Juniongovo	2100

```
cttggcctct ttgggtccac ctcctacaat gcacggctcc aggccatgtg gggccagagc
                                                                     2220
ctcctgccgc ccgtgtccac ctctttcacc acgggtgggc tgcggatccc cttccccagg
                                                                     2280
                                                                     2340
gactgcgggg aggagatgca gaacggagcc ggtgcctcca ggaccagcac catcttcctc
aacggcaacc gcgagcggcc cctgaacgtg ttttgcgaca tggagactga tgggggcggc
                                                                     2400
tggctggtgt tccagcgccg catggatgga cagacagact tctggaggga ctgggaggac
                                                                     2460
tatgcccatg gttttgggaa catctctgga gagttctggc tgggcaatga ggccctgcac
                                                                     2520
                                                                     2580
agectgacac aggeaggtga ctactccate egegtggace tgegggetgg ggaegagget
                                                                      2640
gtgttcgccc agtacgactc cttccacgta gactcggctg cggagtacta ccgcctccac
                                                                      2700
ttggagggct accacggcac cgcaggggac tccatgagct accacagcgg cagtgtcttc
                                                                      2760
tetgeeegtg ategggaeee caacagettg eteateteet gegetgtete etacegaggg
                                                                      2820
qcctqqtqqt acaggaactg ccactacgcc aacctcaacg ggctctacgg gagcacagtg
gaccatcagg gagtgagctg gtaccactgg aagggcttcg agttctcggt gcccttcacg
                                                                      2880
gaaatgaagc tgagaccaag aaactttcgc tccccagcgg ggggaggctg agctgctgcc
                                                                      2940
cacctctctc gcaccccagt atgactgccg agcactgagg ggtcgccccg agagaagagc
                                                                      3000
cagggteett caccacccag cegetggagg aagcettete tgecagegat etegeageae
                                                                      3060
tgtgtttaca ggggggaggg gaggggttcg tacaggagca ataaaggaga aactgaggta
                                                                      3120
                                                                      3128
cccgaaaa
       997
1158
DNA
Homo sapiens
<400> 997 cageggaete egagaecage ggatetegge aaaccetett tetegaecae eeacetaeca
                                                                        60
                                                                       120
ttcttggaac catggcggca gtggcggcgg cctcggctga actgctcatc atcggctggt
                                                                       180
acatetteeg egtgetgetg caggtgttea ggtaeteeet geagaagetg geataeaegg
                                                                       240
tqtcqcqqac cggqcgqcag gtqttqqqqq aqcqcagqca gcqaqcccc aactqaqqcc
ccagctccca gcctgggcgg ccgtatatag tgctcctgtg catctcggcc agcacgggag
                                                                       300
                                                                       360
ccagtgccgc gcaggaatgt ggggtcccct gtgttccctc gccagaggag cacttggcaa
ggtcagtgag gggccagtag acccccggag aagcagtacc gacaatgacg aagataccag
                                                                       420
                                                                       480
atcccttccc aacccctttg caccggtccc actaaggggc agggtcgaga gaggaggggg
                                                                       540
gataggggga gcagaccctg agatctgggc ataggcaccg cattctgatc tggacaaagt
                                                                       600
cgggacagca ccatcccagc cccgaagcca gggccatgcc agcaggcccc accatggaaa
                                                                       660
tcaaaacacc gcaccagcca gcagaatgga cattctgaca tcgccagccg acgccctgaa
                                                                       720
tettggtgca geacceaeeg egtgeetgtg tggegggaet ggagggeaea gttgaggaag
                                                                       780
qaqqqtqqtt aaqaaataca gtggggccct ctcgctgtcc cttgcccagg gcacttgtat
                                                                       840
tecageeteg etgeatttge tetetegatt geceetttee teetacatge etcecaagee
                                                                       900
caccctactc caaaagtaat gtgtcacttg atttggaact attcaagcag taaaagtaaa
tgaatcccac ctttactaaa acactttctc tgaacccccc ttgcccctca ctgatcttgc
                                                                       960
ttttccctgg tctcatgcag ttgtggtcaa tattgtggta atcgctaatt gtactgattg
                                                                      1020
                                                                      1080
tttaagtgtg cattagttgt ctctccccag ctagattgta agctcctgga ggacagggac
cacctctaca aaaaataaaa aaagtacctc ccctgtctcg cacagtgtcc caggaccctg
                                                                      1140
                                                                      1158
cggtgcagta gaggcgca
       Homo sapiens
<400> 998 cactteggag gattgeteaa caaccatget gggeatetgg accetectae etetggttet
                                                                        60
                                                                       120
tacgtctgtt gctagattat cgtccaaaag tgttaatgcc caagtgactg acatcaactc
caagggattg gaattgagga agactgttac tacagttgag actcagaact tggaaggcct
                                                                       180
```

```
gcatcatgat ggccaattet gccataagee etgteeteea ggtgaaagga aagetaggga
                                                                       240
ctgcacagtc aatggggatg aaccagactg cgtgccctgc caagaaggga aggagtacac
                                                                       300
                                                                       360
agacaaagcc catttttctt ccaaatgcag aagatgtaga ttgtgtgatg aaggacatga
tgtgaacatg gaatcatcaa ggaatgcaca ctcaccagca acaccaagtg caaagaggaa
                                                                       420
ggatccagat ctaacttggg gtggctttgt cttcttcttt tgccaattcc actaattgtt
                                                                       480
                                                                       540
tggggaaaca gtggcaataa atttatctga tgttgacttg agtaaatata tcaccactat
tgctggagtc atgacactaa gtcaagttaa aggctttgtt cgaaagaatg gtgtcaatga
                                                                        600
                                                                        660
agccaaaata gatgagatca agaatgacaa tgtccaagac acagcagaac agaaagttca
actgcttcgt aattggcatc aacttcatgg aaagaaagaa gcgtatgaca cattgattaa
                                                                        720
                                                                        780
aqatctcaaa aaaqccaatc tttgtactct tgcagagaaa attcagacta tcatcctcaa
                                                                        840
ggacattact agtgactcag aaaattcaaa cttcagaaat gaaatccaaa gcttggtcta
gagtgaaaaa caacaaattc agttctgagt atatgcaatt agtgtttgaa aagattctta
                                                                        900
                                                                        960
atagetgget gtaaatactg ettggttttt taetgggtae attttateat ttattagege
                                                                        975
tgaagagcca acata
<210>
<211>
       999
1443
DNA
       Homo sapiens
<400> 999 cctactccac gaactgatgc gcccacccca ggcagtaact ctactcccgg attgaggcct
                                                                         60
gtacctggaa aaccaccagg agttgaccct ttggcctcaa gcctaaggac cccaatggca
                                                                        120
qtacettqte catatecaae tecatttggg attgtgeece atgetggaat gaaeggagag
                                                                        180
ctgaccagec ceggagege etacgetggg etecacaca teteceetea gatgagegea
                                                                        240
                                                                        300
qctqctqccq ccgccgctqc tgctgctgcc tatgggagat caccagtggt gggatttgat
ccacaccatc acatgcgtgt gccagcaata cctccaaacc tgacaggcat tccaggagga
                                                                        360
                                                                        420
aaaccagcat actccttcca tgttagcgca gatggtcaga tgcagcctgt cccttttcca
cccgaccccc tcatcggacc tggaatcccc cggcatgctc gccagatcaa caccctcaac
                                                                        480
                                                                        540
cacggggagg tggtgtgcgc ggtgaccatc agcaacccca cgagacacgt gtacacgggt
                                                                        600
gggaagggcg cggtcaaggt ctgggacatc agccacccag gcaataagag tcctgtctcc
                                                                        660
cagetegaet gtetgaacag ggataactae atcegtteet geagattget eeetgatggt
                                                                        720
cqcaccctaa ttgttggagg ggaagccagt actttgtcca tttgggacct ggcggctcca
accccacgca tcaaggcaga gctgacatcc tcggcccccg cctgctatgc cctggccatc
                                                                        780
                                                                        840
agececgatt ceaaggtetg etteteatge tgeagegaeg geaacatege tgtgtgggat
ctgcacaacc agaccttggt gaggcaattc cagggccaca cagatggagc cagctgtatt
                                                                        900
                                                                        960
gacatttcta atgatggcac caagctctgg acaggtggtt tggacaacac ggtcaggtcc
                                                                       1020
tgggacetge gggaggggeg geagetgeag eageaegaet teaceteeca gatettttet
                                                                       1080
ctgggctact gcccaactgg agagtggctt gcagtgggga tggagaacag caatgtggaa
gttttgcatg tcaccaagcc agacaaatac caactacatc ttcatgagag ctgtgtgctg
                                                                       1140
tegeteaagt ttgeecattg tggeaaatgg tttgtaagea etggaaagga caacettetg
                                                                       1200
                                                                       1260
aatgeetgga gaacgeetta eggggeeagt atatteeagt eeaaagaate eteateggtg
                                                                       1320
cttagctgtg acatctccgt ggacgacaaa tacattgtca ctggctctgg ggataagaag
qccacaqttt atqaaqttat ttattaaaga caaatcttca tgcagactgg acttctcctc
                                                                       1380
ctggtagcac tttgctctgt catccttttt gttcaccccc atccccgcat ctaaaaccaa
                                                                       1440
                                                                       1443
gga
       1000
1309
DNA
Homo sapiens
       misc feature
n=a,t,g or c
```

```
^{<\!400>} 1000 acttcctct tcttcgatt cttccatact cagagtacgc acggtctgat tttctctttg
                                                                     60
gattetteca aaateagagt cagactgete ceggtgecat gaacggagae gacgeetttg
                                                                    120
                                                                    180
caaggagacc cacggttggt gctcaaatac cagagaagat ccaaaaaggcc ttcgatgata
ttqccaaata cttctctaag gaagagtggg aaaagatgaa agcctcggag aaaatcttct
                                                                    240
                                                                    300
atgtgtatat gaagagaaag tatgaggcta tgactaaact aggtttcaag gccaccctcc
cacctttcat gtgtaataaa cgggccgaag acttccaggg gaatgatttg gataatgacc
                                                                    360
                                                                    420
ctaaccgtgg gaatcaggtt gaacgtcctc agatgacttt cggcaggctc cagggaatct
                                                                    480
ccccgaagat catgcccaag aagccagcag aggaaggaaa tgattcggag gaagtgccag
                                                                    540
aaqcatctgg cccacaaaat gatgggaaag agctgtgccc cccgggaaaa ccaactacct
                                                                    600
ctgagaagat tcacgagaga tctggaccca aaagggggga acatgcctgg acccacagac
                                                                    660
tgcgtgagag aaaacagctg gtgatttatg aagagatcag cgaccctgag gaagatgacg
agtaactccc ctcagggata cgacacatgc ccatgatgag aagcagaacg tggtgacctt
                                                                    720
                                                                     780
tcacgaacat gggcatggct gcggacccct cgtcatcagg tgcatagcaa gtgaaagcaa
                                                                    840
gtgttcacaa cagtgaaaag ttgagcgtca tttttcttag tgtgccaaga gttcgatgtt
                                                                    900
agogtttacg ttgtattttc ttacactgtg tcattctgtt agatactaac attttcattg
atgacgcaag ccatacttaa tgcatatttt ggtttgggta tccatgaacc taccnnnnga
                                                                    960
                                                                   1020
aaccaagnat tgccggttac ctctgcatgg accagcatta ccctcctctc tccccagatg
                                                                   1080
tgactactga ggcagttctg agtgtttaat ttcagatttt ttcctctgca tttacacaca
                                                                   1140
agtaccagta taagcatctg ccatctgctt ttcccattgc catgcgtcct ggtcaagctc
                                                                   1200
                                                                   1260
ccctcactct gtttcctggt cagcatgtac tcccctcatc cgattcccct gtagcagtca
                                                                   1309
1001
567
       ĎŇÁ
Homo sapiens
       misc feature
n=a,t,g or c
                                                                     60
agagaagacc gtggatcacc tggggacaga ggtgaaaggc ctgctgggct gctggaggag
ctggcctgga acctgccccc gggacccttc agccccgctc ccgaccttct cggagatggc
                                                                     120
                                                                     180
ttctgagccc tggagctgga gcccagcagt tggaggtggt gcacctgcca ggcagcgcca
cagaaccage cetgteetet egaetteett cettagette atgtgaaata aaagetatte
                                                                     240
                                                                     300
tggtctcctc tgtgtctgct gacagagtaa cccgtttaac tacagcctcc tctcactcca
cttccatgcc tggaggaagc ctgcaacccc ctccaggctc agacctgggg acacccccan
                                                                     360
                                                                     420
tectgteatt tataggggaa gatggageag gggttgatte acacagatgg ggggeeetet
                                                                     480
gaattggcct gcttctcaga atgttggcca taggtnaaaa gcaaggggat cggggttcag
gaccancaga atgtttagtg aatctgnatg aatgagaccc caggatttat gtgtccatta
                                                                     540
                                                                     567
agtggttgtt gtgntttaaa aaaaaaa
       1002
299
      ĎNÁ
Homo sapiens
<400> 1002 ccgacatgaa ggtgtcagct gtgatgcatg tttaaaagga aattttcgag gtcgcagata
                                                                     60
taagtgttta atttgctacg attacgatct ttgtgcatct tgttatgaaa gtggtgcaca
                                                                     120
                                                                     180
acaacaaggc atacaactga ccaccaatg cagtgcatat taacaagggt agattttgat
                                                                     240
ttatactatg gtggggaage tttctctgta gagcagccac agtcttttac ttgtccctat
tgtggaaaat gggctatcga gacatctctc agacctgtta cttctaaaca tgcagaaca
                                                                     299
```

<210> 1003 <211> 269 <212> DNA <213> Homo sapiens	
<400> 1003 gttaaaacat ttttttaaag cagtaagttt atagaaaatg ttttcattta atggaaggct	60
ggggaatgtc cagcatcaac ccctatggca tgcattccag tggccttctc atctgggcct	120
ggaacetttg tteagggett aggggagaac aggecacatg geaacageca cacagteatt	180
gcettcacae agagecaegt gteceaaaea gcatagteat gcettgteag etggatetaa	240
ttgtcatagt cgtgctcctc ctgtagact	269
tegecatage egegeteete eegeagaet	
<210> 1004 <211> 263 <212> DNA <213> Homo sapiens	
<400> 1004 gttcagtgct catacgtatc tgctcatttt gacaaagtgc ctcatgcaac cgggccctct	60
ctctgcggca gagtccttag tggaggggtt tacctggaac attagtagtt accacagaat	120
acggaagagc aggtgactgt gctgtgcagc tctctaaatg ggagttctca ggtaggaggc	180
aacaccttca gaaagagctc aaaataaatt ggaaatgtga atcgcagctg tgggtgtgac	240
caccgcctgt gtagagtccc agg	263
<210> 1005 <211> 306 <212> DNA <213> Homo sapiens	
<400> 1005 ataaacccca aggcagccat gtcatagact agtgtttact cttgttttga ctttgtttta	60
atgetteeta agacccaagt geeteetget gttteeteet ttgtggtage etetggeeat	120
ctggacctca atgcccagct ttcccacttt cagcagtcct ttgctctctt tgcttctacc	180
tcaaatagcc ccaggagtgg gctttagtct ccaatatgga gcatctcaag cttctcctgg	240
ggatgggatt ggatggcaga tetgtttgga eteeggtatt eeagtgggta ageagaetgg	300
acttcc	306
<210> 1006	
<211> 423 <212> DNA	
<213> Homo sapiens <400> 1006	
gttcttttga atacttaatg acagaacaaa tacttggcaa actcctttgc tctgctgtca	60
tectgtgtae cettgteaat eeatggaget ggtteaetgt aactageagg eeacaggaag	120
caaagcettg gtgeetgtga geteatetee caggatggtg actaagtage ttagetagtg	180
atcagctcat cctttaccat aaaagtcatc attgctgttt agcttgactg ttttcctcaa	240
gaacatcgat ctgaaggatt cataaggagc ttatctgaac agatttatct aagaaaaaaa	300
aaaaacgaca taaaataagt gaaacaacta ggaccaaatt acagataaac tagttagctt	360
cacageetet atggetaeat ggttettetg geegatggta tgacaeetaa gttagaacae	420
agc	423
<210> 1007 <211> 103 <212> DNA <213> Homo sapiens	
<400> 1007 cageteaege gggaeetgge eggeeteeeg agtetettea ageagetgee eageeegeee	60
ttcctgccgg ccgccgggac agcagactgc cggtaacgcg cgg	103
<210> 1008 <211> 288 <212> DNA <213> Homo sapiens	
<400> 1008 gtttcaagaa cacatgaaat tcttttaaca ccagattagt gtgttacccc aaatgaacgg	60

ttctagccct ctattaagaa gttactactt acaagagtct tccacaatgt tgtgactgat gatctgtgtt gactctggca	tgaaaattat tataaccctg	acagaacttt tttcccctca	gccttctttt gagaagagct	tttaatgtct	120 180 240 288
<210> 1009 <211> 182 <212> DNA <213> Homo sapiens					
<400> 1009 cctcggttgg cacggtgcgt	cttgattaat	tagttactct	gactctggtc	tgccgagatc	60
catttccaac ccagttgcgt	tgggagaggg	ttgggaggca	gcagagcatg	ggtgacagtg	120
ggagcacacg acttccttgg	agcctgggcc	tttgcgggtc	ccaggtggtc	aggcagctgg	180
ag					182
<210> 1010 <211> 320 <212> DNA <213> Homo sapiens					
<400> 1010 ctggacacca cttttaaaaa	gcaatcactg	tgctagaaaa	gtatattggc	tttgttagga	60
ttaaagttca ttaacttcaa	tgtaatcatg	cctcctatta	ctgaagtcag	attggaacca	120
ctaaagatcc aaactttctg	tctggtaata	gaaagtaaaa	atctagacat	catttacatt	180
tgagaaagct gtttttaaca	ttattttaaa	atgccaaata	tgttctttct	agaaaaatat	240
ttatttttgt ttttgttgga	tagcttttaa	ttacatttca	gagaggtgta	attttggggt	300
agatgctcat tacatttttg					320
<210> 1011 <211> 421 <212> DNA <213> Homo sapiens					
<400> 1011 tcgacctcct gaatcatgtg	gttctgcaaa	tgaatacctt	caactaggat	ttagaccact	60
aagaacttgc acagaaaaac					120
cactatgtac catactctaa					180
tgtgtgtgtg cgtgcgtgtg					240
ctttaaaatt ttaaaacaaa					300
atttattgcc caagtttaca	agagtagcga	tacaagtttt	tgcaaattga	atttgcctca	360
gatatatctg tcctaatgct	tatatttgca	caagtatgta	aaatatcgtg	ttgaggatca	420
t					421
<210> 1012 <211> 463 <212> DNA <213> Homo sapiens					
<400> 1012 ctctcaaact tgttttcgaa	teteetggga	gtgagggaga	aacagggagc	tgaatcctcc	60
cccaagctgt tccaggccag	aggactctgc	agtaccttct	cctacatcta	gtaacaaaga	120
atggtgataa ccatgcactg	gttcaaggtt	ctggagttct	ccatgaaact	tgggttaatt	180
ttgctcagag tatccggagt					240
cagcaggctt cctggagcca					300
caccatgaag aggagaaacg					360
ggccctcctg gctcgcagca				ggcttgggtc	420
ttcaacctgt ggcgacagga	ggcagggcag	actgtggagg	aca		463
<210> 1013 <211> 348 <212> DNA <213> Homo sapiens					

## misc feature n=a,t,g or c $<\!\!400\!\!> 1013$ gcaagtgtgg accccaggta gcctcttgga gatgaccgtt gcgttgagga caaatgggga 60 120 ctttgccacc ggatgcttgt nntngcacat ttcagggggg tcaggagagt taaggaggtt gtgggtggga ttccaaggtg aggcccaact gaatcgtggg gtgagcttta tagccagtag 180 aggtggaggg accetggeat gtgcaacaga agaggeeete tgggtgatga agtgaeeate 240 acatttggaa agtgatcaac cactgttcct tctatggggc tcttgctcta gtgtctatgg 300 348 tgagaacaca ggccccgccg cttcccttgt agagccatag aaatattc 1014 532 DNA Homo sapiens <400> 1014 aacaacatga tatgtgctgg actggaccgg ggccaggacc cttgccagag tgactctgga 60 ggccccctgg tctgtgacga gaccctccaa ggcatcctct cgtggggtgt ttacccctgt 120 ggctctgcca gcatccagct gtctacaccc agatctgcaa atacatgtcc tggatcaata 180 aagtcatacg ctccaactga tccagatgct acgctccagc tgatccagat gttatgctcc 240 300 tgctgateca gatgeceaga ggetecateg tecateetet teeteeceag teggetgaae 360 tctccccttg tctgcactgt tcaaacctct gccgccctcc acacctctaa acatctcccc 420 tctcacctca ttcccccacc tatccccatt ctctgcctgt actgaagctg aaatgcagga agtggtggca aaggtttatt ccagagaagc caggaagccg gtcatcaccc agcctctgag 480 532 agcagttact ggggtcacca acctgacttc ctctgccact ccctgctgtg tg 1015 DNA Homo sapiens <400> 1015 tgttaccaat atatccacag aaagaattgc aatttaccaa ggttttcacg tgttttgaga 60 120 gaaatcttac tgaaagacta gtgatgtcca ttttccagta aatactgagc gaaaaacaat ttttataccc caatctgagg tataaacttg ctttttgtgg gatcacaact gctgtaaatt 180 agacaattgt agcaacaatc caagacaata acagaatgcc tatgacagtc tgccatattc 240 tggtgagtgt ctatcaaagc tcatcatgat tttttgtgag atcttccccg taattggtag 300 360 cttggcttcc aacaaacatg ttccagttct ccaatatttc ctctttagtt agcttctcat 420 ccttqttttt qtctqattca tataccagat gcctggcctc agcctgtgcg tgatcataat 480 cttgagggag gatccagtgg cgaatctcat ctttgtctaa cttcccgtct tgttcagatc 501 cggaattcgt taactgctcc c 1016 5338 DNA Homo sapiens 60 ggccgcgagt gcatcttcca cgaacctaat tcatctctcc agcaaaggac acatctctcc agcaaaggac acctctctcc agcaaaggac acctgcagag atgtccccag tccttcactt 120 ctatgttcgt ccctctggcc atgagggggc agcctctgga cacactcgga ggaaactgca 180 240 agggaaactg ccagagctgc agggcgtcga gactgaactg tgctacaacg tgaactggac agetgaggee etceccagtg etgaggagae aaagaagetg atgtggetgt ttggttgeee 300 cttactgctg gatgatgttg ctcgggagtc ctggctcctt cctggctcca atgacctgct 360 420 gctggaggtc gggcccaggc tgaacttctc caccccaaca tccaccaaca tcgtgtcagt 480 gtgccgcgcc actgggctgg ggcctgtgga tcgtgtggag accacccggc gctaccggct 540 ctcgtttgcc cacccccgt cagctgaggt ggaagccatt gctctggcta ccctgcacga ccggatgaca gagcagcact tcccccatcc catccagagt ttctcccctg agagcatgcc 600

ggaacccctc	aatggcccta	tcaatatact	gggtgagggc	cggcttgcgc	tggagaaggc	660
	cttggtctgg					720
ccaggagcta	cagcggaacc	cgagcactgt	ggaggccttt	gacttggcgc	agtccaatag	780
cgagcacagc	cgacactggt	tcttcaaggg	ccagctccac	gtggatgggc	agaagctggt	840
gcactcactg	tttgagtcca	tcatgagcac	ccaggaatcc	tcgaacccca	acaacgtcct	900
caaattctgt	gataacagca	gtgcaatcca	gggaaaggaa	gtccgattcc	tacggcctga	960
ggaccccaca	cggccaagcc	gcttccagca	acagcaaggg	ctgagacatg	ttgtcttcac	1020
agcagagact	cacaactttc	ccacaggagt	atgccccttt	agtggtgcaa	ccactggcac	1080
	attcgagatg					1140
tgccggctat	tgctttggaa	atctgcatat	tccaggttac	aatctgccct	gggaggatct	1200
aagcttccag	tatcctggga	attttgcccg	gcccctggag	gttgccattg	aagccagtaa	1260
tggagcttct	gactatggca	acaagtttgg	ggaaccagtg	ctggctggct	tcgcccgctc	1320
cttgggcctc	cagctcccag	acggccagcg	gcgtgagtgg	atcaagccca	tcatgtttag	1380
tgggggcatt	gggtccatgg	aagctgacca	cataagcaag	gaggccccag	agccaggcat	1440
ggaagttgta	aaggttggag	gtcccgtcta	caggattgga	gttggaggtg	gagctgcttc	1500
atctgtgcag	gtgcagggag	ataacaccag	tgacctggac	tttggggctg	tgcagcgagg	1560
agacccggag	atggaacaga	agatgaaccg	tgtgatcagg	gcttgtgtgg	aggcccccaa	1620
gggaaacccc	atctgcagcc	ttcatgatca	gggcgctggt	ggcaatggca	atgtcctaaa	1680
agagctgagt	gacccagctg	gagccatcat	ttacaccagc	cgcttccagc	ttggggaccc	1740
aaccctgaat	gccctggaaa	tctggggggc	tgagtaccag	gaatcaaatg	ctcttctgct	1800
gaggtccccc	aaccgggact	tcctgactca	tgtcagtgcc	cgtgaacgtt	gcccggcttg	1860
cttcgtgggc	accatcactg	gagaccggag	aatagtgctg	gtggacgatc	gggagtgtcc	1920
tgtcagaaga	aatggccagg	gggatgcccc	cccgacaccc	ccgccaaccc	ctgtggacct	1980
ggagctcgaa	tgggtgctgg	gcaagatgcc	tcggaaggag	ttcttcctgc	agaggaagcc	2040
ccccatgctg	cagcctctgg	ccttgccccc	agggctgagc	gtgcaccagg	ctctggagag	2100
ggttctgagg	ctgcccgccg	tggccagcaa	gcgctacctc	accaataagg	tggaccgctc	2160
cgtgggaggc	ctggtggccc	agcagcagtg	cgtggggccc	ctgcaaactc	ctctggcaga	2220
tgtagcggtt	gtggcactga	gccatgagga	gctcataggg	gctgccacag	ccttgggaga	2280
	aagagcctgc					2340
cctcaccaac	ctggtgtttg	ctctggtcac	tgacctccgg	gatgtgaagt	gtagcgggaa	2400
ctggatgtgg	gcagccaagc	tcccagggga	gggcgcagct	ttggcggatg	cctgtgaggc	2460
tatggtggca	gtgatggcag	ccctgggtgt	ggcagtggat	ggtggcaagg	actccctcag	2520
catggctgct	cgggttggca	ctgagaccgt	gcgggctcct	gggtcactgg	tcatctcagc	2580
	tgcccagaca					2640
	ctgctctatg					2700
tctggcccag	tgcttctccc	agcttgggga	acaccctcca	gacctggacc	ttcctgagaa	2760
	gccttcagca					2820
	agtgacggag					2880
	caggtggatg					2940
	ggcctcgtgc					3000
	gctggcctcc					3060
	cgggtgtcag					3120
	tgggaggaga					3180
	gaggaacggg					3240
	aaagcctccg					3300
	gagggcagta					3360
	tgggacgtga					3420
tttccgtggc	gtggccttcg	tgggcggctt	cagctatgca	gatgtcctgg	gctctgccaa	3480

```
3540
gaageggeea gacacettea geetgggegt gtgtaatgge tgteaactge tggetetget
                                                                    3600
                                                                    3660
eggetgggtg ggaggegace ceaatgagga tgetgeagag atgggeeetg aeteceagee
ageceggeca ggeettetge taegecaeaa cetgtetggg egetaegagt etegetggge
                                                                    3720
                                                                    3780
cagegtgegt gtggggeetg ggecageeet gatgetgega gggatggagg gegeegtget
gcccgtgtgg agtgcgcacg gggaaggtta cgtagcattt tcttctccgg aactccaagc
                                                                    3840
                                                                    3900
tcagattgag gccaggggct tggctccact gcactgggct gatgatgacg ggaaccccac
                                                                    3960
agagcagtac cctctgaatc ccaatgggtc cccagggggc gtggctggca tctgctcctg
                                                                    4020
tgatggccgc cacctggctg tcatgcctca ccctgagcgg gccgttaggc cttggcagtg
                                                                    4080
ggcatggcga ccccctccat ttgatactct gaccacctcc ccctggctcc agctctctat
                                                                    4140
caatgcccga aactggaccc tggaagggag ctgctgactg gccacagggg ctcacctggg
                                                                    4200
ccccatggct tttcacctaa gtgggtcctg cccctcccc catgaccttc aggagcaccc
                                                                    4260
catattattt ccaaaaatat cttggacaga caaggaccaa aatgccaaaa tctcagcgga
                                                                    4320
ctcgatgatc tgcctgctga tgttccttct gtggctgtgt ctattttcag ttctgctcta
acatggcatg ccctttctca gcccaggaaa cagcatgtgg ttcagagaaa agagcgacaa
                                                                    4380
ggaaaagtta ggactcctga ggtccgaaca ggggcttctg ttgcccactt cacaacaccc
                                                                    4440
                                                                    4500
agtgatcacc ggtgtgcaat tgcctccttg gctctgaggg atgttttgcg ctcccttttc
tcatcattgg ggttagcggg tgcagacaaa ttcagcaata gtatgcagat cagccctca
                                                                    4560
                                                                    4620
ccacctcatt gttctcatct ggaactgaaa ctttctggat ttctcttgaa gtgctacact
gcactgaatg taaggaattg ttgcttgtgg aagtttctca gcgtttctgg ctgtcttagg
                                                                    4680
gctggcctca gaacccagca ttcctgttat ttgcttctaa attagcagct ctctttttt
                                                                    4740
                                                                    4800
tttttttttt gaggcagtct cactctgtca cccaggctgg agtgcagtgg cgtgatctcg
geceactgea acetetgeet eetgggttea ageaatttte etgeeteage etecegagta
                                                                    4860
                                                                    4920
gctgggagta caggcacaca ccaccacacc cagctaattt ttgtattttt agtagagata
                                                                    4980
gggtttcacc gtgtctccca ggctggtctc aaactcctaa cctcaagtga ttcgcctgcc
                                                                    5040
teggeeteee aaagtgetgg gattaeaggt gggageeact acagetggee cageagetet
gtttctgata gaggtggttg gggctctcat ccctagatcc taacccttta gtatgctgga
                                                                    5100
                                                                    5160
attetactet teacttactg cattgactgt tgttgattag ttattattge aaageactge
                                                                    5220
caccggcctc agggagttta tgtgtaatag aattaaaaat aatagctgtg tataacactt
agctcaagcc acgcatgtgt gaggcatttg gtatgtatct gaattaattc tcactaaaat
                                                                    5280
                                                                    5338
tcagcaaagg acttgatagc ctctccccgc cttttcaata aaggatgaat gaaggttg
       1017
416
DNA
Homo sapiens
<400> 1017
caatgggatt tacagcaaca ttttccattg ctgaagtgag gtagcagctc tcttctgtca
                                                                      60
gctgaatgtt aaggatgggg aaaaagaatg cctttaagtt tgctcttaat cgtatggaag
                                                                      120
cttgagctat gtgttggaag tgccctggtt ttaatccata cacaaagacg gtacataatc
                                                                      180
ctacaggttt aaatgtacat aaaaatatag tttggaattc tttgctctac tgtttacatt
                                                                      240
                                                                     300
gcagattgct ataatttcaa ggagtgagat tataaataaa atgatgcact ttaggatgtt
                                                                      360
tcctattttt gaaatctgaa catgaatcat tcacatgacc aaaattgtgt ttttttaaaa
                                                                     416
atacatgtet agtetgteet taatagetet ettaaataag etatgatatt aateag
      1018
212
DNA
Homo sapiens
<\!400\!>-1018 cggggttgac ggctttttgg taggagtggg ctggaccgga cgccagagac aaaggctccc
                                                                      60
                                                                     120
aaggcaagag ggactgtggc cctgcgtcgg ctctgctcgg gactgctgac cccaggaatt
```

tacggccctt cgtttttctc ttcccatacaacgc tccgccgccg ttg		cgccatttta		180 212
<210> 1019 <211> 445 <212> DNA <213> Homo sapiens				
<220> <221> misc feature <223> n=a,t,g or c				
<400> 1019 ttttactgca caattcacaa gca	atqttttc ctqqtqaatt	ggactgaaaa	ttacattttg	60
acaacttttt ttccttttat cc				120
ataaagaaag attaaattct cc	aatgatat tttaaaaaat	atcaacctac	atgcacttta	180
gaatgtaaaa taacaatgac ta	ttttaaac tcgaagaccc	actattttga	gtatttttta	240
tagactttaa atactgggtt tt	tttcctcc ttcaatctca	gggcttttct	ccatctttta	300
aggcagcctc tgtaactccc tt	ttgtccat aggtgttgcg	tgcctctgca	tctgtggggg	360
aagtattatt taaataaaat tt	atgttaca gggataactt	tattttaang	gggcnggggc	420
ttgtctatac acaagggtat gt	atg			445
<210> 1020 <211> 426 <212> DNA <213> Homo sapiens				
<220> <221> misc feature <223> n=a,t,g or c				
<223> n=a,t,g or c				
<400> 1020				
gctgacccac cttgtagtag cg				60
cattnegeae ggagttggee tt				120
tggagatgtt atccaagtgc cc				180
cagtggtaca cttccctttg ac				240
gcctggnang ggtggatgac aa				300
ggggtgacag aggggtgaga gg				360
gctttccacc ctaaagggcc ac	catngggct tcaggccagg	gctttcattc	ccttnaaagg	420
cctctg				426
<210> 1021 <211> 449				
<212> DÑÁ <213> Homo sapiens				
<del>-</del>				
<220> <221> misc feature <223> n=a,t,g or c				
<pre>&lt;400&gt; 1021 gagaatgagt cacacaact gt</pre>	tcagtgtt gcaggaacct	tttcttgggg	gtgggggagt	60
ttcccttttc taaaaatgca at	gcactaaa actattttaa	gaatgtagtt	aattctgctt	120
attcataaag tgggcatcct ct	gttttagg tgtaatatcg	aagtcctggc	ttttctcgtt	180
ttctcacttg ctctcttgtt ct	ctgttttt ttaaaccaat	tttactttat	gaatatattc	240
atgacatttg taataaatgt ct	tgagaaag aatttgtttc	atggcttcat	ggtcatcact	300
caagctcccg taaggatatt ac	cgtctcag gaaaggatca	ggactccatg	tcacagtcct	360
gecatettae ttteetettg te	ggagttct ggagtgggaa	atnaactggc	attatgggcc	420
gctttaaccn caggncattc aa	aagaaac			449
<210> 1022 <211> 433 <212> DNA <213> Homo sapiens <220>				

## <221> misc feature <223> n=a,t,g or c

<400> 1022 tcgatgccct tatttgtgag	ttaaaqagaa	aatatcataa	atggtatact	cttaagtata	60
gaggttttgt atctagagga					120
actgtgaata acatacttaa					180
ttttttttt gagatgaagt					240
ctcggttcac tgcaacctcc					300
aagtaggctg gggattacag					360
gtaggagacg ggggtttncc					420
caggtgantc cca					433
<pre>&lt;210&gt; 1023 &lt;211&gt; 3705 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<400> 1023 ggaattcccg gccgggcgca	cccacaaaac	cctagactca	ctaacttaca	cacaactaaa	60
cggggtgtag gttggaaggg					120
accccgacc gtcccctcgg					180
ccaggccacc ctgaagcctc					240
tatccagcag cgcggctact					300
ccggcccata gagcgcgccg					360
ccgcatgtcc tggccctcgt					420
aggcagcagc aggcgcttcg					480
cctggactcg caggcgagcc					540
					600
ccgggagtcc ttcctgtacc					660
ccggaactca tcggtcacca					720
tcaggtgctg gccagcctcc					720
cgttcccagt aacaagcggt					
gtcagaagaa acgtgtcagc					840
ggagcagctg gagaccatgc					900
caaaaggatg ttgaaccgtg					960
ggtctcagag tacatttcca					1020
acccacgatg aaggaacgag					1080
cccgcccct gtaccacact					1140
gcatagtaac agcctgaaca					1200
agageteetg geccaagaac					1260
gtcggattac gctggaggcc					1320
ggacctgctg aagaaattcc					1380
ggaggatcac taccacgctg					1440
gcagtccacc cacgtactgc					1500
gattctcgcc gccctcttcg					1560
ccagttcctc atcaacacca					1620
cgagaatcac cacctggccg					1680
ccagaacctc agcaagcgcc	agcggcagag	cctacgcaag	atggtcatcg	acatggtgct	1740
ggccacggac atgtccaagc					1800
caagaaagtg accagctcag					1860
cctccggaac atggtgcact					1920
ccgccagtgg acagaccgca					1980
gcgtggcatg gaaatcagcc	ccatgtgtga	caagcacact	gcctccgtgg	agaagtctca	2040

<400>

```
ggtgggtttt attgactaca ttgtgcaccc attgtgggag acctgggcgg accttgtcca
                                                                      2100
cccaqatqcc caggagatct tggacacttt ggaggacaac cgggactggt actacagcgc
                                                                      2160
cateeggeag ageceatete egecaeeega ggaggagtea agggggeeag gecaeeeaee
                                                                      2220
cctgcctgac aagttccagt ttgagctgac gctggaggag gaagaggagg aagaaatatc
                                                                      2280
                                                                      2340
aatqqcccag ataccgtgca cagcccaaga ggcattgact gcgcagggat tgtcaggagt
                                                                      2400
cqaqqaaqct ctqqatqcaa ccataqcctg ggaggcatcc ccggcccagg agtcgttgga
                                                                      2460
agttatggca caggaagcat ccctggaggc cgagctggag gcagtgtatt tgacacagca
ggcacagtcc acaggcagtg cacctgtggc tccggatgag ttctcgtccc gggaggaatt
                                                                      2520
cgtggttgct gtaagccaca gcagcccctc tgccctggct cttcaaagcc cccttctccc
                                                                      2580
                                                                      2640
tqcttqqaqq accctgtctg tttcagagca tgccccgggc ctcccgggcc tcccctccac
                                                                      2700
ggcggccgag gtggaggccc aacgagagca ccaggctgcc aagagggctt gcagtgcctg
cgcagggaca tttggggagg acacatccgc actcccagct cctggtggcg gggggtcagg
                                                                      2760
tggagaccct acctgatece cagacctetg tecetgttee ectecactee tececteact
                                                                      2820
eccetgetee eccgaceace tecteetetg ceteaaagae tettgteete ttgteeetee
                                                                      2880
tgagaaaaaa gaaaacgaaa agtggggttt ttttctgttt tcttttttc ccctttcccc
                                                                      2940
                                                                      3000
ctqccccac ccacggggcc tttttttgga ggtgggggct ggggaatgag gggctgaggt
cccqqaaqqa ttttattttt ttgaatttta attgtaacat ttttagaaaa agaacaaaaa
                                                                      3060
aaqaaaaaa aaagaaagaa acacagcaac tgtagatgct cctgttcctg gttcccgctt
                                                                      3120
                                                                      3180
tocacttoca aatcoctoco otcacottoc cocactgooo cocaagttoc aggotcagto
                                                                      3240
ttccaqccqc ctqqqqagtc tctacctggg cccaagcagg tgtggggcct ccttctgggc
ttttcttctg aatttagagg atttctagaa cgtggtcagg aatagccatt ctaggcgggg
                                                                      3300
ctggggccag ggtgggggc agtcactgtg ggaggtccca gctccagccc ccctctggtt
                                                                      3360
tgctgcctcc tctcccctct aaaaaagtct tccgcttgat tttgcacaat cccggcgata
                                                                      3420
ctcctqqcqa tactqactag aagtcaggga gctgggggag ctgttcactt taggatacgg
                                                                      3480
ggggatggaa gggagcgttc acaccgccag cctcgggcct gggatttgag gagggcccta
                                                                      3540
gacctcctcc actctccatc ccctttccct tccactttgg gttcactttg aattttctcc
                                                                      3600
gttttttggg gcagtggctc tgatccactc accccccgc cccgtaagtt atagccactg
                                                                      3660
                                                                      3705
tggaaagtag tatgaaagtt cctcaagaaa ctaaaaatgg aattc
       ĎŇĂ
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 1024 tgccttccct tcaattttaa actgaagcat tttaatgtgg gtagaaactc tacaccaaat
                                                                        60
acactaaaca ttttggtgct tagtggattt ctttttaggt aactggtact tacttccaaa
                                                                        120
gactgaatac aagccacact ccatcatatc ccttaaactt catgaaaaac cattcaagat
                                                                        180
                                                                        240
ccccttqctg caacactgtt ctcttcttct ctactaaatt ctatttccaa aattggtaat
                                                                        300
aqaqccagaa ggatccccca gtacccagcc ctctgcctgg nacaaactgg gtagcacaat
taaattcagt atggggtgga gcatggtaca gtcttgggtg gccaatagga aggggtagtt
                                                                        360
                                                                        383
ggcataggtc acaccatnca ttt
       1025
375
DNA
Homo sapiens
       misc feature
n=a,t,g or c
```

```
60
cacgagetge tatgaagaca tacttgagae teggtaattt atatagaaaa gaggtttaat
tgacaaaaaa gctaacaaag tgagcccatg attcaaaaaat gactgtctac acttggcaca
                                                                         120
tqaqqqactt tatgatatta agagattaat taaacaacag tggatgggga ggaagaacag
                                                                         180
acttttgagc tcttcccaat ataggaatgt gttagttcta aaaattttct taagttgttt
                                                                         240
gcttggaact cagagtntat ttatccatac gaaaaattca gaactatttn atttatgata
                                                                         300
tgggctaaaa agacttctgt aatctagctt gggaaactta ataatcatta aacttatttt
                                                                         360
                                                                         375
caatgaaaaa aaaaa
       1026
339
DNA
Homo sapiens
<210>
<211>
       misc feature
n=a,t,g or c
<400> 1026 tatttaaagg gatagttgat teetggggtg tittgaaatt aagttggaat taagttgett
                                                                          60
aagcatattt atgttgtgag aaacccttaa tatgaggttt atcatgccat ttttcaagca
                                                                         120
                                                                         180
gatttatgag cagatttctg tcacataagt cgtcttctgc ttgagtatcc taatatttca
atgcatcagg ggagcgctcc actggataag cattttattt cccgcatggc ataatgtttt
                                                                         240
                                                                         300
tgcacctaaa aggctcaaag tgtgagaacc tggttcctgg atttgtttga aattntttca
ccaataaaag atcataaatn aaatggtttc tttcangaa
                                                                         339
       1027
222
DNA
       Homo sapiens
<400> 1027
ggggcatggc taacacctcc ctgggcctct tcttcctacc ttgattgagg gtgtgatgcc
                                                                          60
tggagccaca gcagccactt tgctaccatg acaaaaaggc caagagaatc acagagtcat
                                                                         120
tgaccctatc attatttcac caagccaata ccagccgcca tccttctcca gaattcttgt
                                                                         180
                                                                         222
1028
359
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1028 nggcttcaac aaacaggccc cttctttcca taccaccaca gtcacctgac caaataaacg
                                                                          60
                                                                         120
gagaaagett ccagaacgtg agcaaaaatg ctagttctgc agcgaatgcc caacctcata
aactgtctga aaccccaggg cactaaagca gagtttcatc cctgtcttta aactgggggt
                                                                         180
atgtccactc taggcaagta aaaaaactac tgttacacgt tccagtaact ctgtcaatat
                                                                         240
tttcttgtat caggaattgt tattatggca gcctttcatt tggggctggg ttttcatcat
                                                                         300
ttttgcactg tggaantggc ttttacagtg gcattactta caggccagga aggaacata
                                                                         359
       1029
403
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1029
gagaagagga tctggctgct ctgtttgaag cttcaatgaa actgtattaa ttgtcatttt
                                                                          60
aactgaaaga attaccgctg gccattgtag tgctgagagc aagagctgat ctagctaggg
                                                                         120
ctttgtcttt tcatctttgt gcataactta cctgttacca gtataggtgg gatatacatt
                                                                         180
```

```
240
tatcttqcaq qaaattcccc aaagctcaga gtccagttcc ttccataaaa caggctggac
aaatgaccac tatgttagac ccccagggct cgacttcagg ggtcagtgtt cctgtcccaa
                                                                          300
                                                                          360
accccacaca qaatactctg gcctctggct ttcatgtagg ccaaatgagg caaaaaactt
cagtatctat tcaaaagtgg taaaattatt atttccnatg ggc
                                                                          403
       1030
415
DNA
Homo sapiens
<210><211><212><213>
       misc feature
n=a,t,g or c
<400> 1030 atatgctttc actgtttgtg caatatgcat ttatttctta tatgaatgct ttaaagtcat
                                                                           60
ttgaggttag atcttttaat tcctattttc tgcttcattg gtcacttttt ttttattgta
                                                                           120
gtataagatg ttagattctg taatcttcac attcatttta gcaggtactg agtgatgctg
                                                                           180
tatatacaaa taagtgtatt gttttgattt ttagaccacc acatgggcat gcttgactat
                                                                           240
                                                                           300
ttcttatttc aaatqtctqc taatgcagag taggctactc catgatagtg ttaaaaaaca
                                                                           360
aaatttqcta acaatqtqat ataaagactt taaaagttac acattatgtg ggagccctat
ctttacaaaa gtttccnact gttaaggtgc nttttatttt tccggtttca cntgg
                                                                           415
       1031
511
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
gctggaagaa cctttgtctg agggtagttc atagctggaa atacttggaa tattttccag
                                                                            60
agtototaaa ototoatott oococacaga tacacatoca agotoacaaa taggagtago
                                                                           120
aattctaggt ggtagggttg tgtacggaac ccctggctgt ctgcatatat ctcagaatta
                                                                           180
                                                                           240
ccccaggacc attgtcccaa agtctagagt ctttacaggt aggcaaaatt tgttttcaat
qcctqtqcct cagctqctqt cacaaatacc catcttagga tcccatcagc ttcccatccc
                                                                           300
ccaccagaca gccacagtac cctcactttc tccctattgt tctttcaaat cctgttctca
                                                                           360
ggaaagaaac tgccactaat tcattcacac taaggtgtaa anggattgat aatagggatt
                                                                           420
gagttacctt ttcccacaga cnttgttttt aagtatggac agagcgggcc ttattccagg
                                                                           480
                                                                           511
ggaaaggttt gggactggag ggggtgaggt t
       1032
401
       DŇĀ
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1032 taagggtgga ctagtaataa aatataatat tettgetget tatgeantgg acattgttge
                                                                            60
cctccctaaa gcaaccaagt agcctttatt tcccacagtg aaagaaaacg ctggcctatc
                                                                           120
agttacatta caaaaggcag atttcaagag gattgagtaa gtagttggat ggctttcata
                                                                           180
aaaacaagaa ttcaagaaga ggattcatgc tttaagaaac atttgttata cattcctcac
                                                                           240
                                                                           300
aaattatacc tqqqqataaa aactatgtag gcagggcagt gtgttttcct tccatgtctc
                                                                           360
tctqqcacta cctqncagtg tgttcctctg gagggctggc aagtctgttc ctattctgaa
                                                                           401
tttcccaggc aggaaggcac taaggaaggt tcccaacctn t
       1033
1346
DNA
Homo sapiens
```

## <220> <221> misc feature <223> n=a,t,g or c

<223> n=a,t,g or c					
<400> 1033 cagacaatga ggatgaagat g	gaagatgtca	aagctgaaag	actaaaggtc	aaagagctga	60
tgggttgcca gtgttgtgag g					120
atgatgacaa gaaagatttt c					180
tctctttctg tgtgaaaaaa g	ggagagatct	taggactatt	gggtccaaat	ggtgctggca	240
aaagcacaat tattaatatt o					300
taggagatta ttcttcagag a					360
gtcctcagat aaaccctttg t					420
gagctgtcaa aggaatgagt g	gcaagtgaca	tgaaagaagt	cataagtcga	ataacacatg	480
cacttgattt aaaagaacat c	cttcagaaga	ctgtaaagaa	actacctgcn	aggaatcaaa	540
cgaaagtgtg ttttgctcta a	agtatgctag	ggaatcctca	gattactttg	ctagatgaac	600
catctacagg tctggatccc a	aaatgccaaa	catgcacatg	tggcatgcaa	ttcgaactgc	660
atnnaagegg getgetatte t	tgaccactca	ctatatggag	gaggcagagg	ctgtctgtga	720
tcgagtagct atcatggtgt o	ctgggcagtt	aagatgtatc	ggaacagtac	aacatctaaa	780
gagtaaattt ggaaaagnac t	tttttggaaa	ttaaattgaa	cggactggat	agaaaaccta	840
gaagctagac cgccttcaaa g	gagaaattca	gtatattttc	ccaaatgcaa	gccgtcagaa	900
agtttttctt ctattttggc t	ttctaaaatt	aataaggaag	atgttcagtc	cctttcccaa	960
tctttttta agctggaaga a	agctaaacat	gctttgccat	tgaagaatat	agctttctca	1020
agcaacattg gaacaggttt t	ttgtagaact	cactaaagaa	caagaggagg	aagataatag	1080
ttgtggaact ttaaacagca o	cactttggtg	gaacgaacac	aagaagatag	agtagtattt	1140
tgaatttgta ttgttcggtc t	tgcttactgg	gacttctttc	tttttcactt	aattttaact	1200
ttggtttaaa aagttttta t	ttggaatggt	aactggagaa	ccaagaacgc	acttgaaatt	1260
tttctaagct ccttaattga a	aatgctgtgg	ttgtgtgttt	tgcttttctt	taaataaaac	1320
gtatgtataa ttaagtgaaa a	aaaaaa				1346
<210> 1034 <211> 3282 <212> DNA <213> Homo sapiens					
<400> 1034 gggacagggc tgaggatgag g	gagaaccctg	gggacccaga	agaccgtgcc	ttgcccggaa	60
gtcctgcctg taggcctgaa g					120
cctacttcag ccccttggtg t					180
ttaatatata taaatatatt					240

0 0 0 240 ttcgtgtgtc tgagtctctt cactgagagg atgtgcatcc aggggagtca gttcaacgtc gaggtcggca gaagtgacaa getttccctg cctggctttg agaacctcac agcaggatat 300 360 aacaaattte teaggeeeaa ttttggtgga gaaceegtae agatageget gaetetggae 420 attgcaagta tctctagcat ttcagagagt aacatggact acacagccac catatacctc 480 cgacagcgct ggatggacca gcggctggtg tttgaaggca acaagagctt cactctggat 540 gcccgcctcg tggagttcct ctgggtgcca gatacttaca ttgtggagtc caagaagtcc 600 ttcctccatg aagtcactgt gggaaacagg ctcatccgcc tcttctccaa tggcacggtc 660 ctgtatgccc tcagaatcac gacaactgtt gcatgtaaca tggatctgtc taaatacccc atggacacac agacatgcaa gttgcagctg gaaagctggg gctatgatgg aaatgatgtg 720 780 gagttcacct ggctgagagg gaacgactct gtgcgtggac tggaacacct gcggcttgct 840 cagtacacca tagageggta tttcacctta gtcaccagat egeageagga gacaggaaat 900 tacactagat tggtcttaca gtttgagctt cggaggaatg ttctgtattt cattttggaa 960 acctacgttc cttccacttt cctggtggtg ttgtcctggg tttcattttg gatctctctc

gattcagtcc ctgcaagaac ctgcattgga gtgacgaccg tgttatcaat gaccacactg atgatcgggt cccgcacttc tcttcccaac accaactgct tcatcaaggc catcgatgtg

1020

```
1140
tacctqqqqa tctgctttag ctttgtgttt ggggccttgc tagaatatgc agttgctcac
                                                                     1200
tacagttcct tacagcagat ggcagccaaa gataggggga caacaaagga agtagaagaa
                                                                     1260
qtcaqtatta ctaatatcat caacagctcc atctccagct ttaaacggaa gatcagcttt
gccagcattg aaatttccag cgacaacgtt gactacagtg acttgacaat gaaaaccagc
                                                                     1320
                                                                     1380
qacaaqttca aqtttgtctt ccgagaaaag atgggcagga ttgttgatta tttcacaatt
                                                                     1440
caaaacccca gtaatgttga tcactattcc aaactactgt ttcctttgat ttttatgcta
                                                                     1500
gccaatgtat tttactgggc atactacatg tatttttgag tcaatgttaa atttcttgca
tgccataggt cttcaacagg acaagataat gatgtaaatg gtattttagg ccaagtgtgc
                                                                     1560
acccacatcc aatggtgcta caagtgactg aaataatatt tgagtctttc tgctcaaaga
                                                                     1620
                                                                     1680
atgaagetee aaccattgtt ctaagetgtg tagaagteet agcattatag gatettgtaa
                                                                     1740
tagaaacatc agtccattcc tctttcatct taatcaagga cattcccatg gagcccaaga
                                                                     1800
ttacaaatgt actcagggct gtttattcgg tggctccctg gtttgcattt acctcatata
                                                                     1860
aagaatggga aggagaccat tgggtaaccc tcaagtgtca gaagttgttt ctaaagtaac
tatacatgtt ttttactaaa tctctgcagt gcttataaaa tacattgttg cctatttagg
                                                                     1920
                                                                     1980
gagtaacatt ttctagtttt tgtttctggt taaaatgaaa tatgggctta tgtcaattca
                                                                     2040
ttggaagtca atgcactaac tcaataccaa gatgagtttt taaataatga atattattta
ataccacaac agaattatcc ccaatttcca ataagtccta tcattgaaaa ttcaaatata
                                                                     2100
agtgaagaaa aaattagtag atcaacaatc taaacaaatc cctcggttct aagatacaat
                                                                     2160
ggattcccca tactggaagg actctgaggc tttattcccc cactatgcat atcttatcat
                                                                     2220
tttattatta tacacacatc catcctaaac tatactaaag cccttttccc atgcatggat
                                                                     2280
ggaaatggaa gatttttttg taacttgttc tagaagtctt aatatgggct gttgccatga
                                                                     2340
aggettgeag aattgagtee attttetage tgeetttatt cacatagtga tggggtacta
                                                                     2400
aaagtactgg gttgactcag agagtcgctg tcattctgtc attgctgcta ctctaacact
                                                                     2460
                                                                     2520
qaqcaacact ctcccagtgg cagatecect gtateattee aagaggagea tteatecett
tgctctaatg atcaggaatg atgcttatta gaaaacaaac tgcttgaccc aggaacaagt
                                                                     2580
                                                                     2640
qqcttaqctt aagtaaactt ggctttgctc agatccctga tccttccagc tggtctgctc
                                                                     2700
tgagtggctt atcccgcatg agcaggagcg tgctggccct gagtactgaa ctttctgagt
                                                                     2760
aacaatgaga cacgttacag aacctatgtt caggttgcgg gtgagctgcc ctctccaaat
ccagccagag atgcacattc ctcggccagt ctcagccaac agtaccaaaa gtgatttttg
                                                                     2820
agtgtgccag ggtaaaggct tccagttcag cctcagttat tttagacaat ctcgccatct
                                                                     2880
                                                                     2940
ttaatttctt agcttcctgt tctaataaat gcacggcttt acctttcctg tcagaaataa
                                                                     3000
accaaggete taaaagatga ttteeettet gtaacteeet agageeacag gtteteatte
                                                                     3060
cttttcccat tatacttctc acaattcagt ttctatgagt ttgatcacct gattttttta
                                                                     3120
acaaaatatt tctaacggga atgggtggga gtgctggtga aaagagatga aatgtggttg
tatgagccaa tcatatttgt gattttttaa aaaaagttta aaaggaaata tctgttctga
                                                                     3180
aaccccactt aagcattgtt tttatataaa aacaatgata aagatgtgaa ctgtgaaata
                                                                     3240
                                                                     3282
1035
563
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1035
ggggggggnt tactcacaaa ggacagaaat ctccaccaag gaagtcccca ttgtccaaac
                                                                       60
                                                                      120
tgagaccaaa accatcacat atgagtctcc acagattgat ggcggggctg gtggtgattc
                                                                      180
gggcacgtta ctgaccgcac aaaccatcac atctgagtcc gtgtcaacaa cgacaaccac
acacatcacc aagactgtaa aaggtggaat ttctgaaaca agaattgaga aacgcattgt
                                                                      240
```

```
gatcacagga gatggagata ttgatcatga ccaggcactg gctcaggcga tcagggaagc
                                                         300
                                                         360
caqaqaqcaq caccctgaca tgtcggtcac aagagtggtg gtacacaaag aaacagagtt
ggctgaggaa ggggaagatt aagttagaaa gtcattttt tanacaacac tcanctttgg
                                                         420
qaacccctqa qqqattttnt gggcccccnc cgganttcag nttgggcttn accagttgac
                                                         480
                                                         540
ttqqnaannn nnnnntnnnn cnnnnntnnt nnnnnntncn ncctnnnncn nnnnnncnnt
                                                         563
nttccncnnn nnttnnnnnn ncg
     1036
744
DNA
Homo sapiens
     misc feature
n=a,t,g or c
<400> 1036
ttnnntactc cggngatgaa gacagagcag tacaggtgac caagaaaaaa aagaagaaac
                                                          60
                                                          120
aacacaaqat tccaacaaat qacqaattac tgtntgatcc tgaaaaagat aacagagatc
aggcctgggt tgatgcacag agaaggggtt accatggttt gggaccacag agatcacgtc
                                                          180
aacaacagcc tgttccaaat agtgatgctg tcttganttg tcctgcctgc atgaccacac
                                                          240
                                                          300
tttqccttga ttgccaaagg catgantcat acaaaactca atatagagca atgtttgtaa
tqaattgttc tattaacaaa gaggaggttc taagatataa agcctcagag aacaggaaga
                                                          360
aaaggcgggt cccataagaa gatgaggtct taacccggga agatgctgcc gagaaggcag
                                                          420
agacagattg tggaagaaat cttatcaccc agtcatgtgc actgattgtc ccctgaaggt
                                                          480
540
                                                          600
660
720
                                                          744
nnnnnncnnn nnncnnncnn nnct
      ĎŃĂ
Homo sapiens
     misc feature
n=a,t,g or c
<400> 1037 cnnnnnttcn tqtnntcnqa aqaqaqtqac aagaatggag taacacatga actagcactc
                                                          60
                                                          120
tecteatgtg acagagagta catetgacce acatggtgge aggacacagg ggaagggete
tcagagctgg tgccaagtgt ccaccaaaga aagtcccatt caccagagac aggctgtttc
                                                          180
cttqqactcc accatctctq ttacagctac cagccaggtc tccatgatct tcctggaatc
                                                          240
                                                          300
cttcatgcca gcatcagttc atgctctctq agcttgtcac tcccgactct ttcaagaccc
aggtcaactg neceatggnt caccaccca ggncgnetec ggagtcetge agnacatete
                                                          360
                                                          420
tttqqqtatq ctqctqccct gctqccctca agggnatngt tqtqqqtagq qgqaqaacat
caacatcaca ttaccanngq aancagaggg gtacattagt anncganant gggcatggcg
                                                          480
qacaacccan aggacacatg ntcctcccca antnntncta atccncaagn gtgggttcaa
                                                          540
                                                          600
nttggnttan caggtnantg gtaaannggt tnnccngnnn nttgncaann nnnnnnnnn
660
720
773
      Homo sapiens
<400>
      1038
```

<210> 1040 <211> 403 <212> DNA

```
60
tcqaqcqqcc acccgggcag gtctctgggt gaatagcagc gtgtccgccg gcagcgaacc
                                                                      120
gagaccagcg agccgaccat gcggctgcac agacttcgtg cgcggctgag cgcggtggcc
                                                                      180
tgtgggette tgetgettet tgteegggge cagggeeagg acteageeag teecateegg
accacacaca cggggcaggt gctggggagt cttgtccatg tgaagggcgc caatgccggg
                                                                      240
gtccaaacct tcctgggaat tccatttgcc aagccacctc taggtccgct gcgatttgca
                                                                      300
                                                                      360
ccccctgage cccctgaate ttggagtggt gtgagggatg gaaccaccca tccggccatg
tgtctacagg acctcaccgc agtggagtca gagtttctta gccagttcaa catgaccttc
                                                                      420
                                                                      480
ccttccgact ccatgtctga ggactgcctg tacctcagca tctacacgcc ggcccatagc
                                                                      540
catgaaggct ctaacctgcc ggtgatggtg tggatccacg gtggtgcgct tgtttttggc
                                                                      600
atggetteet tgtatgatgg ttecatgetg getgeettgg agaacgtggt ggtggteate
atccagtacc gcctgggtgt cctgggcttc ttcagcactg gagacaagca cgcaaccggc
                                                                      660
                                                                      720
aactggggct acctggacca agtggctgca ctacgctggg tccagcagaa tatcgcccac
tttggaggca accetgaceg tgtcaccatt tttggegagt ctgegggtgg cacgagtgtg
                                                                      780
                                                                      840
tettegettg ttgtgteece catateceaa ggaetettee aeggageeat catggagagt
                                                                      900
ggcgtggccc tcctgcccgg cctcattgcc agctcagctg atgtcatctc cacggtggtg
                                                                      960
qccaacctqt ctqcctqtqa ccaaqttqac tctqaggccc tggtgggctg cctgcggggc
aagagtaaag aggagattct tgcaattaac aagcctttca agatgatccc cggagtggtg
                                                                     1020
                                                                     1080
gatggggtct tcctgcccag gcacccccag gagctgctgg cctctgccga ctttcagcct
gtccctagca ttgttggtgt caacaacaat gaattcggct ggctcatccc caaggtcatg
                                                                     1140
                                                                     1200
aggatctatg atacccagaa ggaaatggac agagaggcct cccaggctgc tctgcagaaa
atgttaacgc tgctgatgtt gcctcctaca tttggtgacc tgctgaggga ggagtacatt
                                                                     1260
                                                                     1320
ggggacaatg gggatcccca gaccctccaa gcgcagttcc aggagatgat ggcggactcc
atgtttgtga tecetgeact ecaagtagea catttteagt gtteeeggge ceetgtgtae
                                                                     1380
ttctacgagt tccagcatca gcccagctgg ctcaagaaca tcaggccacc gcacatgaag
                                                                     1440
                                                                     1500
gcagaccatg gtgatgagct tccttttgtt ttcagaagtt tctttggggg caactacatt
aaattcactg aggaagagga gcagctaagc aggaagatga tgaagtactg ggccaacttt
                                                                     1560
gcgagaaatg ggaaccccaa tggcgagggt ctgccacact ggccgctgtt cgaccaggag
                                                                     1620
                                                                     1680
gagcaatacc tgcagctgaa cctacagcct gcggtgggcc gggctctgaa ggcccacagg
ctccagttct ggaagaaggc gctgccccaa aagatccagg agctcgagga gcctgaagag
                                                                     1740
                                                                     1800
agacacacag agctgtagct ccctgtgccg gggaggaggg ggtgggttcg ctgacaggcg
agggtcagec tgetgtgece acacacacec actaaggaga aagaagttga tteetteatt
                                                                     1860
cacttegeca tteatteata etteegteea gaagttgatt cetteattea ettegeeatt
                                                                     1920
cattcatact tccgtccatc cattcagaaa ccggyattta ttaagaattt actcaggcat
                                                                     1980
gatggcccat acttgtaatc ccagctattg ggaaggatga gatgggagga tggcttgagg
                                                                     2040
                                                                     2100
ccagaggttt gagaccgacc agccagggca acacagtgag accccttctc aaaaaaaaa
aaaaaaaaag agagagtgtg tgattagaag ctaaatagga aagttttgag cttcaagtca
                                                                     2160
gtgaggagta aaaaagattt ttaaaaagca a
                                                                     2191
       1039
265
DNA
       Homo sapiens
tctggaaaaa acacgettta ttgggtagac aaataggeet gatgggaagg eetgagteae
                                                                       60
agtgcactgg ggagtgaaaa agtaggcaaa gtgcttgaag cttccccttt gcccccacct
                                                                      120
taacctcctg gggagcagct ctggacactc agtacccaga cctgggctca gcaaggcctg
                                                                      180
gggtgactgt gcccctcact cctgctgcct gatctgggca gcccaccctt cactggtaag
                                                                      240
acagaattct caagggatag gcgca
                                                                      265
```

<213> Homo sapiens <400> 1040 ttttttttt caaagaaaca ctagcaattt attgattttc tctatttcca aaaaaagcaa	
ttttttttt caaagaaaca ctagcaattt attgattttc tctatttcca aaaaaagcaa	
	60
atacattagt gtatcacaca aggaaactgg gcctggccgg cacaaggttc ctctacaaac	120
atgaagcaag gggaaggtgg gctacaggga agctccaaga tccctcacag cagccccgg	180
ttcccttccc tgcccacccc agccgcagtc ttggtcctgc cagccagttc agccagattc	240
caaggtggac atgcagacag caacactgcc tcttgggtcc ccaggaggag tgtggagtca	300
gggctgctag tgtggtcccc actgcagagg tggctggtgg ccaatgactg gatttgtcat	360
tggccgctag cacaggagat cccagggcag agtctgtgtc ctt	403
<210> 1041 <211> 491 <212> DNA	
<212> DNA <213> Homo sapiens	
<220> <221> misc feature	
<221> misc feature <223> n=a,t,g or c	
.400. 1041	
<400> 1041 tgtggtgagg gctttgggct tgttccctga agctttttat tataaaaaca agatgaaaca	60
tagatcacat tgcagtctcg attgtaatga acctcagctg aatgtgccga cagcggagta	120
tctgatctaa tgtggacttt gaagcatttt gaaatgaaaa aatcttggga tgtttttgtt	180
tttaaaattc ctgtggttgt tcgctaaatg gcaaaatagg gggccaccag ccggacaagc	240
tccagaccac ctacagaaag aaagtctcag gccattatga aggccgaaac gctaacagcc	300
atcttcttct gggtgcacag ccctgcggcc atccccaccg tgagatggta gaaagggcgc	360
gtgcaaggat cagcacccag tgtagaaact gacttgtacc ccgaaggtaa tgcaatgcga	420
ttcccaacag gctcattcca gatataaaaa atatgtcatc actttcatta ggtaatattt	480
aanccaacan t	491
<210> 1042	
<211> 516	
<212> DNA <213> Homo sapiens	
400 4040	
<400> 1042 ttttttttt ttttcagca aatgtttgtt gaattttatt actttttaaa caaattactg	60
tititttiti tittcagca aatgittgit gaattitatt actititaaa caaattactg	60 120
ttttttttttttttaagca aatgtttgtt gaattttatt actttttaaa caaattactg agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt	
ttittttiti tttttcagca aatgtttgtt gaattttatt actttttaaa caaattactg agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac	120
agtaatette ettagtaate atttetgta etcagataaa aatagaaatt tataagagtt tttattttg ttacttgtaa aagtatattt ectagagaaa atateageag tggtagagae cagaaaaagt aagtgtgtgt gttetaaaca gtgatteeaa etcaatgtgt teagagaaaa	120 180
agtaatette ettagtaate atttetgtaa etcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt ectagagaaa atateageag tggtagagae cagaaaaagt aagtgtgtgt gttetaaaea gtgatteeaa etcaatgtgt teagagaaa caetttgace etgtetgtgt ttacagteee tgetgaetgt gtactgtegt ateeteagee	120 180 240
agtaatette ettagtaate atttetgta etcagataaa aatagaaatt tataagagtt tttattttg ttacttgtaa aagtatattt ectagagaaa atateageag tggtagagae cagaaaaagt aagtgtgtgt gttetaaaca gtgatteeaa etcaatgtgt teagagaaaa	120 180 240 300
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtgt gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaaggttatg agaatctcca	120 180 240 300 360
agtaatette ettagtaate atteetgtaa etcagataaa aatagaaatt tataagagtt ttattetti ttaettetgtaa aagtatatte eetagagaaa atateageag tggtagagae eagaaaaagt aagtgtgtg gttetaaaca gtgatteeaa etcaatgtgt teagagaaa eaetttgace etgetegtgt ttaeagteee tgetgaetgt gtaetgtegt ateeteagee ttgttetatt tetttatttt agetttaeag agattaggte teaagttatg agaateteea tggettteag gggetaaact tttetgeea tettttgete ttaeeggget eagaaggaea	120 180 240 300 360 420
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct	120 180 240 300 360 420 480
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct	120 180 240 300 360 420 480
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct	120 180 240 300 360 420 480
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210> 1043 <211> 233 <211> 233 <211> Homo sapiens <400> 1043	120 180 240 300 360 420 480 516
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210> 1043 <211> 233 <211> DNA <213> Homo sapiens <400> 1043 gaaagttcag ttcagtttat tacagtgtca agtagatta caactattgc acttatcatt	120 180 240 300 360 420 480 516
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210> 1043 <211> 233 <212> DNA <213> Homo sapiens <400> 1043 gaaagttcag ttcagtttat tacagtgtca agtagatta caactattgc acttatcatt ctggtgacag aaggccaaaa ctgaagattg agattttcct ctaataaaga taggtttca	120 180 240 300 360 420 480 516
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tggctttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210 > 1043 <211 > 233 <212 > DNA <213 > Homo sapiens <400 > 1043 gaaagttcag tcagtttat tacagtgtca agtagattta caactattgc acttacatt ctggtgacag aaggccaaaa ctgaagattg agatttcct ctaataaaga taggtttca gaatcttcaa tataagatgt taaaattata aaggcaaaga tatatacctc atgttccatt	120 180 240 300 360 420 480 516
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tgctgttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210> 1043 <211> 233 <211> DNA <213> Homo sapiens  <400> 1043 gaaagttcag aaggccaaaa ctgaagattg agatttcct ctaataaaga taggtttca gaatctcaa tataagatgt taaaattata aaggcaaaga tataacctc atggttcat cagtgtcat cagtgtgtca taaaattata aaggcaaaga tataacctc atgttccatt ccatatcctt cctgctgttg tacagtttgc tgcaaatgat aatttaattt	120 180 240 300 360 420 480 516
agtaatcttc cttagtaatc atttctgtaa ctcagataaa aatagaaatt tataagagtt tttatttttg ttacttgtaa aagtatattt cctagagaaa atatcagcag tggtagagac cagaaaaagt aagtgtgtg gttctaaaca gtgattccaa ctcaatgtgt tcagagaaaa cactttgacc ctgtctgtgt ttacagtccc tgctgactgt gtactgtcgt atcctcagcc ttgttctatt tctttatttt agctttacag agattaggtc tcaagttatg agaatctcca tgctgttcag gggctaaact tttctgccat tcttttgctc ttaccgggct cagaaggaca tgtcaggtgg gaaacgtgtt tctctttcag agctgaagaa agggtctgag ctgcggaatc agtagagaaa gccttggtct cagtgactcc ttggct  <210> 1043 <211> 233 <211> DNA <213> Homo sapiens  <400> 1043 gaaagttcag aaggccaaaa ctgaagattg agatttcct ctaataaaga taggtttca gaatctcaa tataagatgt taaaattata aaggcaaaga tataacctc atggttcat cagtgtcat cagtgtgtca taaaattata aaggcaaaga tataacctc atgttccatt ccatatcctt cctgctgttg tacagtttgc tgcaaatgat aatttaattt	120 180 240 300 360 420 480 516
agtaatette ettagtaate atteetgtaa etcagataaa aatagaaatt tataagagtt tetattetti tetettetaa aagtatatte etcagagaaa atateageag teggtagagae eagaaaaagt aagtgtgtg gteetaaaca gtgatteeaa etcaatgtg teagagaaa eaetttgace etgetgtgt ttacagteee tgetgactgt gtactgtegt ateeteagee tegetetatt tettattet agetttacag agattaggte teaagttatt agaateteea tgeteteag gaaeggtgg gaaeggtgt teetetteegeat tetettgeee ttaceggget eagaaggaea tgetaggtgg gaaeggtgt teetetteeag agetgaagaa agggtetgag etgeggaate agtagagaaa geettggtet eagtgaetee ttgget  <210> 1043 <211> 233 <211> DNA <213> DNA <213> DNA <213> DNA <213 teagtttat tacagtgtea agtagatta caaetattge acttateatt etggtgaeag aaggeeaaaa etgaagattg agattteet etaaeaga taggtteea gaatetteea tataagatgt taaaattata aaggeaaaga tatatacete atggteetteea tataacete etggtgaeag aatetteea tataagatgt taaaattata aaggeaaaga tatatacete atgtteeatt eetgetgtgaeagaateteeteetteeteeteeteeteeteeteeteeteete	120 180 240 300 360 420 480 516
agtaatette ettagtaate atteetgtaa etcagataaa aatagaaatt tataagagtt tetattetti tetettetaa aagtatatte etcagagaaa atateageag tiggtagagae eagaaaaagt aagtigtigt gitetaaaca gigatteeaa etcaatigti teagagaaa eaettigaee etgetigti taeagteee tigetigaetgi giteetaate etetetigeee tegetigeet teagagaate teagagaetee tegetigeet teagagaetee tegetigeet teagagaetee tegetieteet teetitatie agetitaeag agattaggie teaagtiatig agaateteea tigetiteeag gigetiaaaet teetitigeet taeeeggiet eagaaggaea tigeaggiigigigigigigigigigigigigigigigigi	120 180 240 300 360 420 480 516

```
120
aacaacatcc atccacttct taatgtcttt atgaacacag aggctagagt ccccagccag
                                                                         180
cttctgaggc agccctgcac atcctgcagg tggccacact caacccatgc cacaccgttt
gcttaaagct acaagtccta gagctgaaga actggcaagc cagtgcgtga agcttatcga
                                                                         240
cagcgcttcc aggcacacga gcaaagctgc gcagatacag gggaggttcc ttggggc
                                                                          297
       1045
563
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<\!400>1045 ttaatcaact ctgctgttgt tgctgcttct tagcaaaact ggtaaaaaca aaattgtaat
                                                                           60
                                                                          120
cattqaacat agcactctgg caatcaagac gcttaaaacc ttcaatcttc tggggcgaca
agcactgtgc gacatttaga actctgatta acaaacaagg tggtcacaaa ttttcctggc
                                                                          180
ttgaagactt ctacaacttt cctgatcagg tcatcatagg aggtctgact taagtttgtt
                                                                          240
tcaaagctaa cataagaaaa ttctggttct ggagtgatgt gaataagtcc aataagttcc
                                                                          300
atcccgattt cattccattc atccgaatac ccacaaggat tgaacattgt ggcatcaatg
                                                                          360
                                                                          420
acagaacctg gtatcaggtc acgaattcca ctctcacgag tgacatccct tgcagtaaca
ccatctttca tgtagaactg gtccataact gctgggtcaa gctcactcat cagaatttcc
                                                                          480
cagggttgat ctggctgact gattaccccn ctcctctggg naatccaggn atataagtac
                                                                          540
                                                                          563
cacagtcagg attcctacgt ccc
       1046
446
DNA
       Homo sapiens
<400> 1046 tttttacaca aagaaaaaga ttttattgtc ttcttagtca atatccctgg tgaaattaga
                                                                           60
ggcatagctt gagactggtg acagtgcaac acagaccttc aggagctgct ttgaggactg
                                                                          120
                                                                          180
gcctgcccag atgcctgctg ttaagccagc agccccctca ctccggcccc tgccatcttg
acagatggag ctgccatggt ttcagggaca ctcagcaggg catctgggtt ggtccctccc
                                                                          240
acatggacct tgtaaagttg ctattcaggg gaacctggta tcgtttcagg caaaacacag
                                                                          300
aaccatatta gcacttctaa gccccctgcc ccggccgcct ccccggaaca tttgggcttg
                                                                          360
                                                                          420
tegeacatte caggagggag caggageaca getgeageea cagetgeeag gaacaggeet
                                                                          446
gggctcccgc ctgtgtgggg ggaagg
       1047
273
DNA
Homo sapiens
<400> 1047 cacaaacaaa gatggtttaa tagatttcag catgtttcca cttgacaatg ttatacgaaa
                                                                           60
                                                                          120
atagaatett tattaaaata geaaggeata aeaateaetg etaeteagga aacaetgtgt
                                                                          180
ttattctttt taatcatcaa aatcaatgac tttgggcaag acctgtgaaa tctcagagcc
                                                                          240
tqtttctcca tctggagaac aggcaggtag ggcattgcca gctccctgtg agtgggggcc
                                                                          273
actggtggga ggagatggcc ctggtcgccc atg
       1048
496
DNA
Homo sapiens
^{<\!400>} 1048 tagttattaa aatacattta atgcttggta ttgtgaacat gcagacgaaa gaaaataaga
                                                                           60
ttacaaaatg aaataagagc tagaattaaa agccgatgta taggaaatgt tctcaactgt
                                                                          120
                                                                          180
gcaagtgatt aacagccaga tgttccccta cgattccaaa catgagtccc cagtgccaag
                                                                          240
ttccagcccc aactctgctg gagtctcaga gaaaatgtat agtaacaaaa gcagccaaga
```

cttgtgtggc gtccgtctta t gaacacatgc attcctcaag t ggatttgctt caattcttat t aataagtatt gcttcagtga t cttcctaacc ttctaa	tttaagaag taagcttca	ataaataagg tggaatgcaa	tggaaaaaaa acataggagg	taaatettag etaaageaga	300 360 420 480 496
<210> 1049 <211> 245 <212> DNA <213> Homo sapiens					150
<400> 1049 tttttcaaat tagaattctt t	taatataaa	aaaaaqtact	aaaataccca	cataatteta	60
ctgtgttatt tgccctaaag g					120
gggcccagaa atggcgtttc c	ggtaggcta	aggcgtgccc	actccacctc	caccagactt	180
ctatcccctc tgctgttccc a	agcccccaat	tcctgcagca	ggaaacccca	gtggtctggc	240
tttgg					245
<210> 1050 <211> 388 <212> DNA <213> Homo sapiens					
<400> 1050 tgggggtagg ctctttatta g	gacggttatt	gctgtactac	agggtcagag	tgcagtgtaa	60
gcagtgtcag aggcccgcgt t					120
gtgggtgggt ttcttcagaa a	aagccccaga	ggcagggacc	agtgagctcc	aaggttagaa	180
gttggactgg aaggcttcag t	cacatgctg	ctttcaagct	ttcaggctgg	gcaacaagga	240
ggagatgccc atgacgtgcc a	agggtctccc	catctgacac	cagtgaagtc	tggtaagaca	300
gcagccgcac gcctgcctct g	gccaggaggg	caatcatggt	aggcagcatt	gcagggtcag	360
aggtctgagt ccggaatagg a	agcaaggg				388
<210> 1051 <211> 384 <212> DNA <213> Homo sapiens					
<400> 1051 ttttttttt ttttcttaaa t	tatatttat	tatatgaaat	acaaaatqtq	gaaaatttgg	60
aaattacaga aaaaccaaag a		_			120
ccactcaaca ttttttagta t	_		_	_	180
acacccatat tttaaaaaaac a					240
ttaatattca aggagcattt t					300
tgcgcggtac tccaccatct g					360
caaactttcg ttacagcaga a	aag				384
<210> 1052 <211> 382 <212> DNA <213> Homo sapiens					
<400> 1052 ttgaaaataa caaaaaaacc a	a++-a+				60
tatgtacacg cggtgacact c	aactttact	tgcatttagc	cattaataaa	taatttacag	
cacgoacacg cggcgacacc					120
cacttccaag cagaacgtga g	ccacacaggt	cgcagaacgg	tggacgcagt	gaggggtccc	120 180
	ccacacaggt gcaaacacaa	cgcagaacgg ccaaaataaa	tggacgcagt gtgcttcact	gaggggtccc ttttacttcc	
cacttccaag cagaacgtga g	ccacacaggt gcaaacacaa ccagcaggga	cgcagaacgg ccaaaataaa gagggagggg	tggacgcagt gtgcttcact ccgggccgag	gaggggtccc ttttacttcc tcgccctccc	180
cacttccaag cagaacgtga g aacataggga ccaactaaaa c	ccacacaggt gcaaacacaa ccagcaggga ggcagaggga	cgcagaacgg ccaaaataaa gagggagggg gcaggacctc	tggacgcagt gtgcttcact ccgggccgag ttggagggag	gaggggtece ttttacttec tegeeetece ggggagaeae	180 240
cacttccaag cagaacgtga g aacataggga ccaactaaaa c acccgcccac acacggttct g	ccacacaggt gcaaacacaa ccagcaggga ggcagaggga cagtgtatga	cgcagaacgg ccaaaataaa gagggagggg gcaggacctc	tggacgcagt gtgcttcact ccgggccgag ttggagggag	gaggggtece ttttacttec tegeeetece ggggagaeae	180 240 300

<213> Homo sapiens					
<400> 1053					
tttggggtcagggtgcctt	tattggtgaa	tgggaatgtg	tgggttggag	ctcaatggcc	60
atatgtcggc acgtccaggg	tccccaaggc	agcaggttcc	aaggcactgg	ggcagcccac	120
gccgggggag gcccctgagc	agcaggcacc	attctcgccc	tggcagggcc	tgccacttgg	180
ggagagcgga ggctggccag	gccttcagca	aagctgttgc	${\tt agctcaatca}$	gctcctcttg	240
tgggacccgg aggctttctg	ccggtagatc	tcagcggtga	agggctcttc	gtataggaga	300
gccattatgt aggtgagggc	caccagcacc	gtcaggagta	ggcccgtggg	cgtggcgtgc	360
atgatggccc agccaggtag	ttggctgtgc	ttccccagta	catggggttg	tccaggatgt	420
tgaaggggaa cacggtcact	ctcgcctcct	tgaggatccc	gaagtaatca	cctaggaa	478
<210> 1054 <211> 469 <212> DNA <213> Homo sapiens					
<400> 1054 agtattatca tttattgagt	agctacactg	tggccagaac	taagctttac	atgttttata	60
tcacttattt atctcaacaa	tcttgaaagg	gtggtattat	${\tt tttccccgtc}$	ttataggtga	120
agactctgag gttcagaaag	ttaaagtgat	atcgccaggg	ttcctgactg	gtaagtgatg	180
gaggctgaat ttgagccaga	tctatatgct	ccatcatcac	tctcctgggg	aaaagagcct	240
agatgtgttc tatctgcatt	cctgcttaga	ttctgcatga	cttctcctgt	ccatcccctt	300
ggccccctct cctctagtcc	atgagattac	agctttgcac	actgacagga	gggtccttcc	360
ttcttagcct acacatacaa	ccaggtgtca	aaggatggaa	gggttcatct	cacacactca	420
cagaccatgt agactattca	atctacacct	ccagctcgaa	ctcagaaca		469
<210> 1055 <211> 363 <212> DNA <213> Homo sapiens					
<400> 1055 taatatttga agaaatttat	tgagtcaaat	atgagtgacc	atgccccatg	acacagccct	60
cagaaggtcc tgaggacatg	tggcaaaggt	gttcttcaaa	gtgttcatta	ttaaggcatc	120
catctcccat aacttcaatg	cactttgcta	aacaatgcat	tatttctgag	gacatctgaa	180
tctgtttctg taccaatggt	cttaatcaga	acatcacata	aattgccaca	tctgtgtgag	240
atactcagga ccacggactc	tcacacactc	cagaagaaaa	ggcacggatt	ctgctgctgc	300
ccctccaaca ccattgtgga	aataaaattt	cagtaaaggg	accaccagtt	tgacaacctg	360
ctt					363
<210> 1056 <211> 120 <212> DNA <213> Homo sapiens					
<400> 1056 ttttttttt ttttttt	tttttttt	tttttttt	gcaggaagac	tatgtctaga	60
gcgaaggcta cacagacccc	acgatggggg	agtggggcct	gaggtgggag	aggcctggag	120
<210> 1057 <211> 586 <212> DNA <213> Homo sapiens					
<400> 1057 tttttcctgt tttgaaagtg	ttttaattag	acaaaagcat	caggacaaac	cattttaaaa	60
acaaagtctt caacttgggt	gttgagattg	gcaaaagggg	aagcaaggga	aaagccaagg	120
aaagataaaa tattcagaag	aaagtcaaag	ttatctgcaa	ttacatgtta	gaacagattt	180
tgcaggttaa aaagatgttg	cttaaatata	ttcataagcc	tgttgtaaga	ttttcactta	240
tgcagtttca gaaaatttag	ctgcttaaca	tatgacagaa	ctgtatttta	acaaatgaca	300
ttaaaagtca ggagagctac	tcagttaatt	gataaagtag	aggcaacgtg	ggggagccct	360
ccccacgttt attgaagatt	tgtggctccc	ccagccccgt	ttgcctgcat	caggctaaca	420

acctcattcc tcccatagag cctggccaaa tcacaggcgg tggtcccctt atggttccga tgccccacat tgctggccgt gtgcttcacc agggactcca ccaccgggag gtgggccttc	
taccacacat tactagacat atactteace aggaacteea ceaccaggag atagacette	480
egococacae egotigooge gogotocae agggacoca coacogggag gogggootoc	540
tttgggcage caagtgcaag ggcaggttee etteattate etegat	586
<210× 1058	
<210> 1058 <211> 451 <212> DNA	
<213> Homo sapiens	
<400> 1058	60
tttttcacg tgtaagattt ttattcaaat ttgatttaca ttccaaaaga aattataaaa	60
tgtattcact tgtttataaa aaaaatttgt ggggggacaa aactttaatt caaattataa	120
aacatgataa attttcagat taaaattggg caagttgctt ggagtaacaa gtttttaaat	180
caccattttc cacctccaca ccaaggataa ccttctaatt aatgatcagc catgttgtaa	240
taggatagca ctgagacttg aggaaacaga aaaactgaag agctcttcca agccccgacc	300
aggaacattt ttatgccttc tcatagtggc gaacagcaac cacatcacca aaagtaaggg	360
tcataaccat tttgccatcc ttaatttctc ttacaaaatt tgtttctttg ccatcccatt	420
tetgtatgtg aacaagtttg tetecateea g	451
-210× 10E0	
<210> 1059 <211> 315	
<212> DNA <213> Homo sapiens	
<400> 1059	<b>د</b> ٥
ttttttttt aaggaatgaa ctttttaatg tttttctgtt tccattctaa caaacatgca	60
tttttgcctt cagaaaatag agtcaatagc tgtgcagagt tgaagaaaaa cgtcctctgg	120
tgttccctct gcatttatct tgtgtagctg tgtttttgtc tcgtagtagg cgatcacggg	180
gatggacgct cggtagtagg cttctaggcg cttggcgatg gtcttggtgg tgtcgtccac	240
aggcaggctg ctccggctcc ttttgagaag gcggttggtc atggtgtctg ccgagcagtc	300
catacagatc accaa	315
<210> 1060	
<210> 1060 <211> 323 <212> DNA	
<213> Homo sapiens	
<400> 1060 ttaacagtta aacttttata tttacaatat tctcttcatc ttttgccagg tttaaaaatg	60
tgtacagage egcaaagggt tggggtaggg ataagggatt gtegggattg ttttggggag	120
tytatagage tytaaagggt tygggtaggg ataagggatt gttggggattg ttttggggag	
aggregations catterparts outgoings toategories outgoings outgoing	
aggagetggg cattggagte egtggetgaa teatggggte eeceageece eeteecatge	180
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg	180 240
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt	180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg	180 240
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag	180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag	180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210 > 1061 <211 > 503 <212 > DNA <213 > Homo sapiens	180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens <400> 1061	180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210 > 1061 <211 > 503 <212 > DNA <213 > Homo sapiens <400 > 1061 ttttgtaat cctttaaaaa tatttatta agcattgatt tagaaaacgc aagacaagat	180 240 300 323
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt	180 240 300 323 60 120
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagga ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat	180 240 300 323 60 120 180
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagga ctagaccagg caggggaaag gatcagaaa taactaattt tccatggatg gaggtaggaa gag  <210 > 1061 <211 > 503 <212 > DNA <213 > Homo sapiens  <400 > 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgtcaacg cttgacactt ttagcttcct atcaccgcac	180 240 300 323 60 120 180 240
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <2212> DNA <213> Homo sapiens  <400> 1061 ttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt ttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgtcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct	180 240 300 323 60 120 180 240 300
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagaggag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210 > 1061 <211 > 503 <212 > DNA <213 > Homo sapiens  <400 > 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgtcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct cagctatctc ggaggcctca tacctccatc atgtgaagag tcaaccagtc ccatctttcg	180 240 300 323 60 120 180 240 300 360
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagga ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct cagctatctc ggaggcctca tacctccatc atgtgaagag tcaaccagtc ccatctttcg gaatgctctt tcagaatatg taattttata agtattttt tttctactga gagaacatag	180 240 300 323 60 120 180 240 300 360 420
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgtcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct cagctatctc ggaggcctca tacctccatc atgtgaagag tcaaccagtc ccatctttcg gaatgctctt tcagaatatg taattttata agtattttt tttctactga gagaacatag atcttcaaa ggcaatggca gaatacagct taaatggaca cagttcactg ttaacattgc	180 240 300 323 60 120 180 240 300 360 420 480
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagga ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct cagctatctc ggaggcctca tacctccatc atgtgaagag tcaaccagtc ccatctttcg gaatgctctt tcagaatatg taattttata agtattttt tttctactga gagaacatag	180 240 300 323 60 120 180 240 300 360 420
cccaattctg agggcatctg tctacagggt tcagggccca ggtctctagc atttggaggg catggctgtt tggagagag ctagaccagg caggggaaag gatcagaaaa taactaattt tccatggatg gaggtaggaa gag  <210> 1061 <211> 503 <212> DNA <213> Homo sapiens  <400> 1061 tttttgtaat cctttaaaaa tattttatta agcattgatt tagaaaacgc aagacaagat tgtaacacct cagggcaaag gcttgaaggt gaaacaaata acactataaa tattgcactt ctaaaatctt tttttgacat cttcacacaa ctcaattcta aaatatcctt ttacagagat gtataaataa acgcttccaa gctgtcaacg cttgacactt ttagcttcct atcaccgcac taagtcggca ggtttccaat cagatagctg ctcctctgac agcaggcaaa gaacttccct cagctatctc ggaggcctca tacctccatc atgtgaagag tcaaccagtc ccatctttcg gaatgctctt tcagaatatg taattttata agtattttt tttctactga gagaacatag atcttcaaa ggcaatggca gaatacagct taaatggaca cagttcactg ttaacattgc	180 240 300 323 60 120 180 240 300 360 420 480

<212> DNA <213> Homo sapiens	
<400> 1062	60
tititttiti tittgcaaca gagcagaaag gatgctttat tigcaaaaga giggigaaca	60 100
tctaaaaagt tgacattgta tatgattaca aagtaaagag tactcttgtg agagaagtta	120
catgttcatt gttaaggaaa ttatatgtaa atcacaaaga tcatggtctg tgaataatgt	180
gccatatctc acaaaatatg gtcattggaa tcttattaaa attatctaca ggtgacttca	240
gtttccattc tccaccctct gccttaagat acgaagcctt gacatgacca catcccagtc	300
agcataagct ccttc	315
<210> 1063 <211> 495 <212> DNA <213> Homo sapiens	
<400> 1063 geggeegega eeteaacega agettteeeg accagtttag eaceggegaa eeceeegeee	60
tggacgaggt gcccgaggtg cgcgccctca tcgagtggat ccgcagaaca agtttgtgct	120
ttctggaaat ctgcatggtg gctcagtggt agcaagctat ccttttgatg attctccaga	180
acataaggcc actggaatct atagcaaaac ctcagatgat gaagtattta aatacttgtc	240
aaaagettat getteaaace acceeataat gaaaactggt gageeteatt gteeaggaga	300
tgaagacgag actttcaaag atggaatcac aaacggcgca cattggtatg atgtggaagg	360
tggtatgcaa gattacaatt atgtgtgggc caactgtttt gagatcacat tagaactgtc	420
ttgttgcaag tacccacctg cttcacagct tcgacaggaa tgggagaaca atcgtgagtc	480
tttgatcaca ttgat	495
-210- 1064	
<210> 1064 <211> 225 <212> DNA <213> Homo sapiens	
<400> 1064 ttttttttt ttttaggagg agaaagacca tttatttctc cacccacagt gggactgtgt	60
aggttttgaa aagagcaatc gctggcatcc ctttaaatct tggctgactc ccaccgtggc	120
agccaatcag cagaggcgga ctggtcgagt tgcctgggca caggcccctg gttggccgaa	180
qacaattaqc caccccactg cccactccca acgaaaggga aattg	225
<210> 1065 <211> 288 <212> DNA <213> Homo sapiens	
<400> 1065 tttcatgctt tttatttttc ggtttattta atcttcttta acacagccat tgttggttca	60
acaatccaat atttgaggtt acattattgc aaaaataagg acatagctga ataggttatg	120
ccatcaatat gtttgttaat cctatccctt ttattaaaga caaagcacag tttgttaata	180
ttgtcttgga ttaactctat ttgtaaggtt acttatagtg gttcatacta aaggcagggg	240
atttgcttcc tgggccaatt gtctttaaac tataatttaa gaaatcat	288
accegecee egggeeaace geeceaaac carranteria gamme carr	
<210> 1066 <211> 464 <212> DNA <213> Homo sapiens	
<400> 1066 tttattggac tgtaggtttt tattaaaaca aacatttctc atagctctaa gcaaagcatt	60
agaattcatc aagcggactc acatcttttc tctgcacaga gagggctgaa aagggagaga	120
aagteeetta tgtatgteta gatttggtaa agegaaggat tteagegaat gagteaetga	180
ggctatacac gtttgcaaat tgtaaggcac tggcgggcag agagcacaga taaaggactt	240
ctggggtccc ccatcctgtc cagcaacctc ccagctcaca ccttagcttc taccaagaag	300
ggtgaacaca gcatccctgc tatcttcact cagaccccag aagacacagg aaaccgcaca	
	360
gctccactcc caccataact tattaggaga taagtcacat tttatcaact tgccatcgcg	360 420
gctccactcc caccataact tattaggaga taagtcacat tttatcaact tgccatcgcg cctcctatag attatacttc ggtaaaccca atctgtataa attc	

<210> 1067 <211> 308 <212> DNA <213> Homo sapiens <400> 1067 ctaaatgctt taatttyyts aaaaggaggg ctagtsatac gaggtaacac tgtacttcty attagagaaa atgaataagc aagctagaca tatcamamct camwtycc	atttstyaat aggtatgtya attagtctca	ggcactttta ataatammty gcaaaaacaa	aaatgtrgct mmggttataa aaattagttt	ttggtatata tggttgccat ggmagtagat	60 120 180 240 300 308
<210> 1068 <211> 308 <212> DNA <213> Homo sapiens <400> 1068 ctaaatgctt taatttyyts aaaaggaggg ctagtsatac gaggtaacac tgtacttcty attagagaaa atgaataagc aagctagaca tatcamamct camwtycc	atttstyaat aggtatgtya attagtctca	ggcactttta ataatammty gcaaaaacaa	aaatgtrgct mmggttataa aaattagttt	ttggtatata tggttgccat ggmagtagat	60 120 180 240 300 308
<210> 1069 <211> 304 <212> DNA <213> Homo sapiens <400> 1069 agacaggaac acagtgttta ctcataagga ttttgcattt ttgctgmaaa tgggatttc agrtttbcta tatagtacag tttctaatag ttttycaact aata	tycccattgt aaattacatt attttcatgg	ttattcttag tccaattggc kgaactatta	acagtataca caatgctata aacaaaacta	gttccaagtt ttctatatac ccttttgtca	60 120 180 240 300 304
<pre>&lt;210&gt; 1070 &lt;211&gt; 325 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1070 gaataatctg tgctttaatg tgtttactaa acatttcagt ggrgctaata ccaattctag aaaatgaatg ycactgtctt ttctttccaa ctaatagaac tatcataatg ttaaatattc</pre>	gtcaataatt ccatgggrgt taaattgtac atttaatgat	ycttaagatt atgttttggm ttggrgcaaa	gtaacattta ctttytgaac gacaaagaaa	accttgtatt aattttgrgt catcagctca	60 120 180 240 300 325
<pre>&lt;210&gt; 1071 &lt;211&gt; 212 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1071 ctaactttta tetttatteg ttegattttg ttgetttaga agggaagtga aatcaageae ttaaaaacag geacatatae &lt;210&gt; 1072 &lt;211&gt; 308</pre>	gattggcagc ttaccctgcc	atatcaattt tttcytgtac	gtcctgagaa	ctgataataa	60 120 180 212

<212> DNA <213> Homo sapiens	
<400> 1072	60
tccacaactg tctcaccaac tcagtgccag tacacatgct ctagaggact tctggactcg	120
cagetacaac tgtacaagtg cacacaagtg aatetaceet gttateetee acceactgat	180
tgaggatega attgeacatt tetettaace atgacaggag aaagcaaaca gtgaaacaga	240
atcatgggtg atctttctca ctttccctct tgttttcatt ggtttgtcca taccattcta	300
attatcat	308
<210> 1073 <211> 266 <212> DNA <213> Homo sapiens	
<212> DNA <213> Homo sapiens	
<400> 1073 aaagtcgtga gtttattgca tatgtaacaa aatgaacctg acctcctggg cccagcctgc	60
tgtacaatca ctgtttgttt tgtgtttcca gctggttcca taaccacatt aaatagaact	120
agtatttcat taaatacttt tgattttgac atagaacatt agtgtacaac tttcacaaaa	180
taaatcagtg ataaaaacag tgggaaggat aacaaggata gcagcaatac ttcaaaacaa	240
gacattacaa aataaattaa aaaata	266
guoutoutuu uutuuutuu uuuutu	
<210> 1074 <211> 313	
<pre>&lt;211&gt; 313 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1074	
ccaactcagc agetetattt acataacage gtegeecaca eecegtgggg cetetnaegg	60
cttcttggct ttcttcacgg aagatgagct ggaggccgac tcccgtcgct ttctcgaatt	120
gggcgtgagg ggtgcgccca ccacatcaat gatggtgtcc ttggggtcag gaccaagtcc	180
gggttcagtc actgccggct cagcagaggc cgggcctggg cctgatgctg gtgtggcagg	240
geceetage acaceagece gggecagtge eteatgaegg tgeegeagea tetgeagete	300
atactcgcag ttg	313
<210> 1075 <211> 229	
<210> 1075 <211> 229 <212> DNA <213> Homo sapiens	
<220>	
<221> misc feature <223> n=a,t,g or c	
(223) 11-4,0,9 01 0	
<400> 1075 aaagaacaca tttgctgttt ttattggtgc cttgcatggc agtaatactg aaaanggaga	60
atgcaaaaaa ataaaataaa ataaacaaaa aacaaaaacg aaaaacaggt tggtggcaac	120
ccacatcttt tttttaagag cacataaact cctgttttat ttttattgtg gcatgaatga	180
taacataaaa ccaaaancat gaaaatatac aacttatatt acactatgt	229
<210 1076	
<210> 1076 <211> 294 <212> DNA <213> Homo sapiens	
<220> <221> misc_feature	
<223> n=a,t,g or c	
<400> 1076	<b>60</b>
gcgaatctgt tgatttattt acggctcggt gagacgacgc tggacgctgg ttagggtaag	60 120
ggttagggca agcattagca gcaggggcat ggccctggga agcacctgga ccccagaaca	120
taagacagga gggagagatg ccatccattc agcgggcact tatgcccacg accagctgag	180

ccagaccage atteccattt caccacceet tacteeteaa gatgeaaatn aageteaggg ctgggeggaa getggeaggg etgteeaeag ggaggaceee egtgtgtete tegg	240 294
<210> 1077 <211> 256 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 1077 ctccaacaat ctggaatttn attccatcca tatacatgca tagtaacaac atttgttgag aaattatttc tatcagaagt agaacattat ctttgtgatc accaggtgca gtattgctac tctnatattt aaatagatct tatatatgan ttaaattcat acttgcagca ttgagtttag ggtttcgatt tagactgtgc ctttcaaaag ataaaactga ttaatactac ctcattactt acaatactgc ttccag</pre>	60 120 180 240 256
<210> 1078 <211> 305 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 1078 gctcagtgaa gatttattgt tatagaaggc aactaataca atagatttgt gggctcgaaa ttttaaaaag ttctaaaaag gcagttaaag cttgacaata aacttgagta aggtttacac aatatcaaag tatattagtt ctttgaaatg aaaaggtatt tttttnctnc ctttaacatt gagatgtctg agatgtcagg attttgtagc attcttagaa acaacatcca ctgtgtggga tacttttttc ccttctggag ttttaaacca gtctgactct ttggttgtgc ctatacaatg aaaag</pre>	60 120 180 240 300 305
<210> 1079 <211> 243 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 1079 caattaaagt aatttattgt attcttccag atcagacata aagagcatct tgggaattga taccacaaca caatgttata caccattttc acaaccaggc ttgcattgaa ttcttttta aagaacatag taattttaaa aaatctaaat atttacatat taataaaaca tatatacaga agattgagac attatccata gatatggatt ttttttttgc taaaaaagcc tataaaaagg ttt</pre>	60 120 180 240 243
<210> 1080 <211> 345 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 1080 aagaggttaa ctcattgttt ttatttggta atcagaagaa catacaagta cttatgcatt actagatgct gggggaaaat tatacattga aggactgtca ggctcatctg tgcaataaag atttacaata aacacatcat taattttcct gagaacagct cagtatactc tgttttacat gaatccttat gatttaatct tgtatttgga gatatgatgc tatggcattt ggataacatt ggttaagcag catcttagag aacagaacac tcttcctcag aatggatggc cattcttta ccctgtgatg tacaaatgca aattacaacc tgcattttat ctgcc</pre>	60 120 180 240 300 345
<210> 1081 <211> 325 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	

```
<400> 1081 aagatatttt actttttnc tttaatcagc acatttcttt tgataaatag tcatgagacg
                                                                          60
tgttctgtga gtcactacaa ttctcacttg gcacttggaa cagtcgtgtt atataggttt
                                                                         120
accataactc tcagaacagg agtatattac aaacaagtgg agtagaacat agagaataca
                                                                         180
taatttgttc taatattcct cttccttaga gccttcaaac ttaaaccaag ttgaaaaaaa
                                                                         240
                                                                         300
aagtttccca aattgaaaac attgcctatg gattatctac agaagagagg aaaataagca
                                                                         325
accattttga ttccacaaac caagc
       1082
440
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1082 gaccacatca ctgctcagcn antengecae ggctgcctga atggccccag ctcggccctg
                                                                          60
caggggagac gactgcatgc cagtgacatt gacatcgtgg taggcttcaa gccaagcctc
                                                                         120
agtgcccaga aggtcatgtt ctgttaccag gaagacgata tctttggccc aataaatctg
                                                                         180
cccccggaag tgggcagcca gtgccagcag cagccccaca gcctgggctg ttgggtagag
                                                                         240
tcagagccac agggcacggg tgaggcacaa gcgccttcgt gccgaattct tgggccttga
                                                                         300
ggggcaaatt tccctattag gtgagtcgta tttaaattcg taatcatgtt cataggntgt
                                                                         360
                                                                         420
tttcctqttq tggaaattgt ttatnccgct tnacaatttt ccacaacaac attacggagg
                                                                         440
ccggaaggct taaagtgtta
       1083
325
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1083
ttttttttqa atacatacca tactttnnta accaagacaa ttcagctgtt tttccagagt
                                                                          60
atatttcaaa cagagttggc atataacccg tatgtaacaa tattgctgtg attttagtca
                                                                         120
                                                                         180
tatttaaggg tccaaaatat gttcacaaaa gaacagtttg tgaatgtcaa ccagtttttg
                                                                         240
ctttatattc cttcaaaaac attccaccct gggcatncac actaatctac atcactgaaa
ataaccaaaa taattcacag tctcacctct atgtaaaaat tctaattgac tcaacaggga
                                                                         300
                                                                         325
aaggactgcc ctgctccttt tgagg
       1084
188
DNA
Homo sapiens
<210><211><211><212>
60
gtttgcgccc ccacattctc tcctgggacc taacgatttt gcgccatttt ctaatgttgt
                                                                         120
                                                                         180
tttctctaac aattttcaaa gtcacatttg gattccttca gaattgtatt tgtcagctag
                                                                         188
cagctcgg
       1085
350
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 1085
aatgagggna agggaggcaa actggactag aggggctagg aggaggcaat gctgggaacc
                                                                           60
```

<210> 1089

```
120
aggtctcccc accacctgcg agtaatgtcg tgcaaatgaa aatgtgatac aagaactaat
ggggactaac tcctcagtaa aaaaagaaac acaggttgag agaagagtga tggaacaaaa
                                                                           180
agaaatggaa agggatagca gtatgtaatg atacgctaat taacatgctg ggacgntccc
                                                                            240
aaagaccttg ggattcttag ggaccaagtg ggggccagtc tcagagcctc ccaatgggnt
                                                                            300
acaaaggaag gatgttaccc taagggaagc ctgggacagg tgcttgttgt
                                                                            350
<210><211><211><212><213>
       1086
475
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1086 tttttttca gttgagcaga catttattaa gcacctatca agtgcaaggc ntgttgctag
                                                                             60
                                                                            120
gcgccgtggg aaatacagag aacacaggcg gtccctgccc acgaggagct cacagtctag
aaagggcagc aagacagtac acaatcagtg gcagcagcac cagccagagt ggcaagtgct
                                                                            180
                                                                            240
caaagcaaga cacaaagtgc tgtgcggttc acaacatcat ggggatgctt ctggcagaag
cactggaaag gagacgagga ctcaggctgg gccttccagg gagggaagcc atttgggaga
                                                                            300
agggcatete tageggagag aggtecatet geagageeea eaggteatgg gaaacatgtg
                                                                            360
gnctgcaggg agagtttggg ggacanttca agtatggnct ggggaggtng acagccacgg
                                                                            420
                                                                            475
acattaagtt caggagattt tganctttnt ggtctggttc aaacagccac tncag
<210><211><211><212><213>
       1087
443
<u>D</u>NA
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 1087 cagatatant atcaacactg aggtttacca gtacaaatac aatatcttgc ctcaaaaggc
                                                                             60
cttaaacagt acggaaatgt gttatctaaa ttaattaaag gttataaagt caagttggct
                                                                            120
                                                                            180
ccagacatgg nacaatgagg acatctggac agatataaaa gagaactctg aacccctcat
atcctcctaa acctttctaa gaggcagtcc tctcaaatcc ccaaccaagc tgctctgcat
                                                                            240
taaacatttc aatgacttaa cctgggggca atggcctcac acaggtatgc agcttcttct
                                                                            300
                                                                            360
caggcaggcc acccctttc actgctctgg aaccctccgg gcccaggagt tctcaggcat
aggcccctag gataggcagg tacaagggtc tggattttaa ggngataacc aaggcatttt
                                                                            420
                                                                            443
ggttaatttt cctagggggg gtt
<210><211><212><213>
        1088
384
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 1088 gttaccaaga cacaatttta agatcaaaca agtgtcaagg taggccatgg cttgttggca
                                                                             60
gtagtagggg ccctatggct atttccaggt atgggtggcc ccttttcctt ggttatctgg
                                                                            120
                                                                            180
ggaatctgcc acagcagaca gcaaaaggta aaaagcatcc ctttaataac tacaccccac
                                                                            240
tccagcaatt gaggtttatt caggggtggg tcaaagtagt acaagacaaa aatagcttag
                                                                            300
tqaaatgqnt tagaatccag actgaggtgc cagactgcct gcatctgagg tctcaggtcc
                                                                            360
caccatgtat ggaggccgtg tggaccttgg gggtgaggtt actaggcctc cccggggttt
                                                                            384
caaatcttct tcacctgtaa aatg
```

```
332
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1089
nctattttta ttctttttc ttgcttaatt tagggtagtg ttgggataga agatacactt
                                                                              60
tataaaaagc agaaagacca atcattgagt tattttagag acaatatgcc agatccatac
                                                                             120
ctttagattt aatcttacct ttttttttag tttctcttca ttcaagccga ggtagaaagc
                                                                             180
cagtggtgga aagctgtggm attgcatagg ctacaaacat tgtattgtca acttgaaagt
                                                                             240
atagctactt ctaaggatgt tgatgttcat tgtaggtttt ttatttatag gtaggctaaa
                                                                             300
                                                                             332
attaggaagg caacttaaag gcttcccaaa aa
        1090
398
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 1090 cattqtcata tqtctctqta atggggtggt gggacacata gtgtctaaca cttcagtttc
                                                                              60
tctgctgctt ccctcccatt gagaagccag tgacagggtt gctgtgaaga tgggagagct
                                                                             120
                                                                             180
tetgaaceca eeteattaaa ggatgagaaa eecagggtee gagageaaag ggaettgaeg
gtggccgcaa gtgcttcaaa ggcagagctg ggattggaac ccagggtgtc atctcgatgg
                                                                             240
                                                                             300
gaatgtccag cagtgatgtc caagtgggaa gtgaagaccc gaaggctcaa gggacacagg
tggctgacag tggtcaaagg ctagggggca ggattcaggc agaggagctc ttaggggggt
                                                                             360
                                                                             398
tttttgccac cctgtntgaa ctcccgagac tntaccag
        1091
241
DNA
Homo sapiens
<210><211><212>
<400> 1091 gaaacaatct gggtattaca ggaatctact ttgtcaactg taaatttatg aaatctaaat
                                                                               60
acagatcaag tatttctgat gaaaacgtat gaactgagat atgctgttaa atgtaaagta
                                                                             120
cacaggattt tggaaatgta gtacaaaaag aatgtgaaaa cccacaattt taaaatactg
                                                                             180
                                                                             240
attacacact qatacaatat tttagataca atggggttaa ataaaatata ttaataaaaa
                                                                             241
а
        1092
223
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
^{<400>} ^{1092} tttttttt tggcgttttt atcttttgt attaaaaag tagtaacaga cacaaatatc
                                                                               60
aaaaacacaa atgccatcgn agacgggtac agctgagaac gcctgggtcc cacctgaggg
                                                                              120
gcagcaccag ggactccatg gtccaccaac ctcccccact ccagagcage taggggctgg
                                                                              180
                                                                              223
aacccccqqq tcctqcttqq gcctcaggtc tcctcccatc tgg
             sapiens
        Homo
        misc feature
n=a,t,g or c
```

```
<400> 1093 anaattcaaa cttttatttg gcaataagtt cagagtcaca taacacataa aatcaacatt
                                                                           60
                                                                          120
taaaataaat agcaaattca catctagaat aaataggtct gcctaatttg cattaattgt
qcctgatatc atacaggcac aatctgtcat tccacgagat aactggaaaa gtctccaaag
                                                                          180
tcagagttca aacctgcagg actgaaaaca cacagaagca ctgtcgcagg ttgggttccc
                                                                          240
cgaaagcaga tactgaggtg gagaatggcg tgcaggaagg ttcataggac agtgctgtgg
                                                                          300
gctgagccgg ctgggtacag gcttgtcagg gagaggcact gggctgtaat gtggccacaa
                                                                          360
                                                                          420
tgaggtetea etggaeeeea caaggggete tggagetggg atggeeeeag aggtttteee
aagttggggt gaggaggcca gacctttgta ccccatatgg agccggtaa
                                                                          469
       1094
454
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1094 agacgggett ggtgaccegg acceggacte tgtgeteagg atceteetet gtaggttggg
                                                                           60
gtgatggggg aggctttttg gggacaaccc tctttttctt gtgcttcttc accagctctg
                                                                          120
gactctgttt ttcctccagt cttttgatga gtttgttgag agtggatgtg agagccagca
                                                                          180
ttgcccgatc ccgctctgac tccttcttca gcccatctgg gtccagctct ttctctgtct
                                                                          240
ccgaacggag ccggtctcgg tctgacggaa gcaggatccc ttccagttcc ttctcaaatt
                                                                          300
                                                                          360
ctcccagtaa ctgccgttca tcctcatctt catcctcatc ctcatcctca tcctcctctt
                                                                          420
cttccatctc tctctggccg ttctggatca accetttect tctneggggt nectetgaag
                                                                          454
gaattetgga aggaataate caaagggtgg tett
       1095
506
DNA
Homo sapiens
       misc feature n=a,t,g or c
<\!400> 1095 taacataaag catttgttta ttattgctat actcaaggca aaatctctta attagccttg
                                                                           60
ataatggaag tataaccaga accattattc atgaatttac attttgttct tttctgctgt
                                                                          120
tgagacttca ctgtttcaca cacaccatct accccaagac ctttaatata caagaacaag
                                                                          180
aagaattaac ttgaaagtca caaagcatgg cttgaccact tgcctagttc ctgactttag
                                                                          240
                                                                          300
gccaatcact teceetetet gaacetgttt cateetgtgt taaaaaagaa atgggagagg
aagaggagag gatagaataa acctacaact gagataacac aggtgataac tgaaagaaca
                                                                          360
tgaatgaaat ttcactgtga ataaaaaata ttatataana taaagtatca ctaataacaa
                                                                          420
ataggggttg tggagggtaa aacagtctat ggttcctggg aagcctggca tgacagtagc
                                                                          480
                                                                          506
caagatctaa atcctggggg caggac
        1096
396
DNA
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 1096 catggtacaa aaatgtttat ttaaattaaa tatttgcaac aaattaatat tgacaactgt
                                                                           60
tccaaagtat gagttgttct ttcaaaaaaa cgaaacagtt tagcttaatg tctgtgatac
                                                                          120
tgttttatga gattattcat acatgctctg gactgcgcat cagtcaatca tatcatcaac
                                                                          180
aatttactat ttattaccaa atggcatata aagtaatagc ataaagagta atcatacctt
                                                                          240
```

ataagtgatt ttacaatagg acatcttaga aggacaaaaa ggatttatca acaatacaaa	300
acataagata aaaataatag gagattatat aanacatatt tcatacagga aataatatgg	360
ctaaaatcca aaaaaccaac caactggtct ttcagc	396
Cladadicca adadaccade cadecggeer recage	
<210> 1097	
<210> 1097 <211> 587 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<220>	
<221> misc feature <223> n=a,t,g or c	
1225 2 4,0,9 02 0	
<400> 1097	60
tcaaataatc catctaacag ccatgagacc actcaagtat ttgaggtcat cagctgcgtc	120
catcaagaca tgatattgaa catggacacc atctggtctg ttggtctgtt tttgttggca	
aaggactcca aaaggatgca gttgtatgtg tttcagctga accacatacc atagctcctc	180
tcccctcaca aaagggtttc tctgggggga gaaaagtaac tgattatacc tctcatgtct	240
caaactgaaa ttctgagaag caaatggtca gttgagggcc ccattccaga tctgccggga	300
cgtcctcaga tgtccagagc tggcaaaagg tggagcaggc agcagctttg ggcaccagcc	360
tgtctctttc tgttctgata aggccacaca catggctttt tgtgataagc ttccagccca	420
tgccactgaa ataacgttta agaacctggc tgcatttcac agaaatagcg taatgggaaa	480
	540
tcattatgta attaaacaaa gcatgaagct cattatcctt ttccttttaa caaaccttca	
atttcacatt ttagtggaca ctgtggnttc cagagaatat atggatt	587
-210 1098	
<210> 1098 <211> 446	
<210> 1098 <211> 446 <212> DNA <213> Homo sapiens	
<400 1098	
ttaaccagaa aagaatetet ttaatatett gtageegtaa gaetgataea aetgaaaaca	60
taaccctaaa tttgattctg caggttgcag ttacaacaca agttgaagtc acagccttgc	120
cggaactett atgtaaagtt tagggeattg gatetggaag gagtgggaee etgagaateg	180
taaagggata tttgggtgga cttgagcaaa tccaagaacc ctgaactgag gaagagcagt	240
gtgagtacat ggtcaggggc tccatgaata ttcctgcctg caaccccagc ttcacaggca	300
attcagcett etecacaetg geeeggeaet ggetagetge teacettatg getegaggea	360
ggacccccc gcagccttac agctggagtg ggaagttgct ggaagttgta tctgtttatt	420
	446
gcttttaagg ctgtcatgag cagaca	440
<210> 1099	
<211> 402 <212> DNA	
<213> Homo sapiens	
<400> 1099	60
ttcgacatat aaccaaatgt tatttaatat cttaaaaagt aacacaatcc aaaatggata	
tttcacacaa cactacataa acaacatgaa cacagtatca ccatagggag ggactttcaa	120
atatagactt acaaaaatcc ctcgtccttt tttttctttt aagttattat actaagcatg	180
acaagtaatc atcatttaca gtatggtaca ctgacacgat aaaaaccatg ttacaaatgt	240
gctgttataa atcagtaaca ttagggaaga catttcatga actgtaatta tttcatatga	300
aatactatac aatataaaca gaacatccat cttgggatga cctttacagc aaccagagac	360
caagtaattt aaaatttttt ttcagtgcaa acacatttta tt	402
Caaguacoo aaaaooo aaaagagaaa aaaaaaaaa aa	
<210> 1100 <211> 438	
<212> DNA	
<213> Homo sapiens	
<400> 1100 gattaactat gtgactaaat tatattcaaa ttttatgaac agaaaatgat ataaatgtta	60
tcagctaata aagagattat caaagagtaa gcaaccaaaa caagtaggca aaaagcatca	120
	180
gagagtaatt aatacaaaga tgatgttgtt tttctggatt tcataatgtt tatcatagtt	100

gtcaactttt ctcattcaaa aaaaccctta tttttatacc taattttaat taaaaatttt tcagtttgta ttaaagagga ctccccaaat tatatgagtt tccaacttca taaaacctaa atctgtcttt gttcatatca gataaaaata ggccacacag actgccaagt aggtacagtc ttggaactgt ctgtggtgct ggacccaagg ttcacttggg ctctctccat gggtacttac tggcccaagc caaagctg	240 300 360 420 438
<210> 1101 <211> 230 <212> DNA <213> Homo sapiens	
<400> 1101 cagtaaaaac tetttattea tteetteatg tgacagttgg eettgagtag ttacaaagae	60
agagcagttc ctgcctctca gaattctaag cagacattcc agagctcaca gatcagtgtc	120
ccaccagctg ctaccctgga agcttcaggg agatggggag cctggagtag gggggtgctg	180
caggaacccc cggcaggcag tggggccagg cttcacaggc acccagggct	230
<210> 1102 <211> 335 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 1102 tttgaaattc caattgtaaa tggttctctt tgaaatactc agttttacat aaatgcttat</pre>	60
ccagcagcac gtcataaacc acagggccaa aacaatttct tgtcacgtaa acatggcgtt	120
ggtagctaaa actcaaattt agcaacaaat aattgttttc ataggactca taagataacc	180
ttaaattgtt agatgctttt agggcattgg ctaattcaga attggctggt attataacag	240
aacttaattt ttgcaggcat ttaaagattt tcacgcatta tgtacctgaa ggttttgtct	300
cttaattttc tttgaaccac acctcttctc cttat	335
<210> 1103 <211> 425 <212> DNA <213> Homo sapiens	
<400> 1103 catcataaaa aaccaaaaga aatttttata tctcaaattg gtaaacttta caaaatattt	60
aacatatgag gaagaggtat atcttacaga attatttggc tatgtcataa ggcagtaatg	120
aagatggaat ttttcctatc ataaatctga cataagtgaa agtctataac atggtcattc	180
tccataaatc tgaaagcttg ttggttacag caatatgatc atgccacact gtcgtcgtta	240
ttgaactttg atgaaagtag actgaatgag aaaggaacaa atttggtgcc tgcacaaccg	300
tagaatttgt tetgaaatte taeeeagtgg aggegtatgg egtgaagaaa egeagaaage	360
ccttccatga tcagaaggat gaaaatggtc aaaactgcaa agagcgcgat aaccgggagc	420
agtag	425
<210> 1104 <211> 440 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1104 gtttattaaa ccagatttat tetecacaag etgaagatae etgaggttae atgaggaetg	60
gcattaaata atttataaat gtatttttga ctgacagact tttatcataa ggattcatgt	120
gtttacaaaa gcaaaatcca acctctccag agctagaaag tgggaaggtg cccgggctgc	180
aacacagcct tgggggagga tgaggccaca taattctctc tgcccacact ctcagaatgc	240
cccaagaagt tagtagctac acaaagccaa gccttggggg aaaacctggt ccgtggtgtg	300
gactetecaa aatgeagace caaceggang cegggeeege etttecatet ggaggeaetg	360
cagggettet gaaageggee cateecagga geetggeaaa caeeceeaga gaeecteagg	420
atgcgcagcc ccggggcttt	440

```
1105
276
DNA
Homo sapiens
^{<\!400>} ^{1105}_{\rm tttttttt} tttttttta agagtagtta aaatgtgttt attcatttac aaacccagta
                                                                            60
acatgagaag aaactcagtg gaaaccttgc ttggtggaga cagtgcacag tgttagtgcc
                                                                           120
acattcacag gggcagaaat gctcggtcac cctgtgcacc caaagtcacc caggatctct
                                                                           180
agaaaagatc ccacttactg aagtgcctcg gatgtcttca gggccagatt gtaactacac
                                                                           240
                                                                           276
aggaacaggg aagggctaag cttgaactgc acactg
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 1106 ttttttgact agaaagggag cactttaatg aacagaagta cagacgtgct ggcaaggatg
                                                                            60
gaaatctcca ctggttcctg gcccccttca cctccatgca tccccagcat gggtgttaat
                                                                           120
cattacccaa gctctcgctg ttccccctca cccctgcag agtccagcag gtctagatac
                                                                           180
gtgctctttg aaatgtgttc tgggattaaa aatggtgccc tgaggctgtc taaccctcac
                                                                           240
                                                                           300
aaaaqacaqa cacatgcaca cacgggcctt ggggagggct gtgtattagc agtcaggtgg
gccctcctgg gagagcttgc tcaagaactc ttctcggaag gaaacccacc ttaaggtagg
                                                                           360
gttctgatag gcagantccc agagggacag ccagctgcta gaagatgggg ttatccaggg
                                                                           420
tttgtaaggt ttaaacaacg ggcagggagn caaacgagtc aaatggtttc ctcgtgcgaa
                                                                           480
                                                                           529
ttttqqctcq aggcaaattc ctatagtgag ngtattaaat cgtaacatg
       1107
610
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1107 tecettete cetettete cetteette tecetteett cettettaga
                                                                            60
                                                                           120
attcactqaa qtatttccta ggtagccttt tacttactac tttaatcaaa gcttatcttt
gtgcccaatg tgtaaaaagt gaaaatgtct cttcgaaatt ctatattaca atatagacag
                                                                           180
agaagttggg ccttgagggc ttgagtttca cttaaatact atacacatgt ggtatcacac
                                                                           240
aaggtggagg gggagggaac aaacagaaac ataacaatta tttttattct gtctttacaa
                                                                           300
                                                                           360
aagaaagcct cttctctatg aaaaagtctt tttggcatct gctcccggaa acctgccccg
agaacacgtt ccccattgct ttgcaagcat ctctttttaa aagcacanca ctgtccccgg
                                                                           420
gagtcacgta ggttggatta anctgtctta gttgaccaac gaagaancac tggatgagtt
                                                                           480
ttccagggat gantggttgt ctggggtgga acatatagtc ctgtctacaa caaatgtaac
                                                                           540
tcctgatatg ggacnatgaa cncagtgtgt gacccaggag tgnttgatct gtnaacantc
                                                                           600
                                                                           610
gcatgnaatt
        1108
381
DNA
             sapiens
        Homo
       misc feature
n=a,t,g or c
<400> 1108 tactgaaata cacagattca cttcagctca gcgtttactg agcatctgcc atagggcact
                                                                            60
```

```
120
gtngcttgga gctgggattt aaacagctcc agtccctggc ctgcacagaa agtgaaggcc
agtggggaca ggcatgtaag cccgtagcag cagcacaccc ggccacagcg gccaagtgca
                                                                           180
                                                                           240
qcaaqtactc acaqaattcc agggcgatgc caagaggctt tcagaggggc caacctgtga
gccagaactt tgaagggacc aacggatttc cccagatggg acaaggaaca gaatgggtgt
                                                                           300
                                                                           360
tattacccaa ggcaagatta aagtgttatt gggaaggttn acagagggcc agccaacatt
tggggcacac cacaggggca a
                                                                           381
       1109
330
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1109 ttttaaagaa tacggcactt ttaataggcg gcagccccag gnggtgcgtg gacagaccct
                                                                            60
gtccacagcg cctggctccc gtgctgcctg tccttccatc tggaatgcca aacagaagct
                                                                           120
cctctcaggt ggcatctggg gagtaggtcc cagtcctgaa atatacaaag tggcgcctcc
                                                                           180
cactgggcag tggtcactgg gctgcacggt cctttcaagt cctagggtgg cccctcaggt
                                                                           240
                                                                           300
cactgettgg cettetteac aatgggtgee cacageagag atgaeggtgg tettnggage
                                                                           330
cgctgggctt gggtggtga ccgtgacaac
       1110
350
DNA
Homo sapiens
<400> 1110
tgccttgttg cctaggctag tcttgaattc ctgggctcaa gagatcctcc catcttggcc
                                                                            60
teccaaattg ttggtgttaa aagegteaae caecaeaeet ggeetgteae ttetttatea
                                                                           120
tqttaatttt catctaaaaa aactatcact gaaaactttt ttaagtataa tcaaatgagt
                                                                           180
tcaactgtca cgttaaggat gccttgaatt cttttgattt tctagttcca atttctagct
                                                                           240
                                                                           300
ttaatatett caaateacee tgeecaagtg ggtgtgtgtt tttacaceet etetgggeee
tttaggtttt ctgctggggg gaacccagga ccggccaggc ccaggcaccc
                                                                           350
       Homo sapiens
       misc feature n=a,t,g or c
<400> 1111 ggaattttta ttacaaaata aaacacaagc atgataaact aatgctggaa tatatcattc
                                                                            60
taatttaact agagctaagc aaataaaatg caaatgaact atgtaagnaa cagcatgcag
                                                                           120
ngaaacaagt ntttaattca gtaacaagtc tccatgcaaa cgggaaaggt tgctaaccnt
                                                                           180
atttggcaaa cactgcatca ctatctacaa atggcctcta ttcatatcaa gtagngctga
                                                                           240
cttgaacttt ttaacanc
                                                                           258
       ĎNÁ
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} ^{1112}_{\tt gaatttttct} gttgtgttgc tgtctttaat aagtgaacat atgtttgcat ttgcacaagt
                                                                            60
gtattaaact ctaacatgca tattgacaag tgtacatata aggtcagagc tcaaggaatt
                                                                           120
ttcataagct gaagacacca tgtaaacttt acaaacatta aaaagaatca accagcaccc
                                                                           180
```

```
caqtagcctt cccttctatt ccctttttaa tcacccaccc cttccccagg ggttatccct
                                                                           240
acctcctgga caaaaaggat tggggttttg ccctctcttt ggtactttaa ataaatgggg
                                                                           300
gatecataaa ttatggggge etetttttge catggggget teetttggae tecaaantta
                                                                           360
tgggttncgg ggggactcc
                                                                           379
       1113
319
DNA
Homo sapiens
<400> 1113 ttttttttt aacaagtgac tagtgtttaa tctcagaaac atttgcattc agagtacgtt
                                                                            60
cccttaqaat tttctcctct ccactccatg aggagtgggc atgtgcttta ttatatcaac
                                                                           120
aagactaaga agccgcaccc gagtggtccc actcaaaaaa gagatttctg tttctacctc
                                                                           180
                                                                           240
aaaatgcaga aaccactaca gattaaaaga gaaacacaca cagacacttt gagaaactcg
cccttcctca tcttcaaagt gtgggggtat gcattccaga tctctcagcc tgatgggaca
                                                                           300
                                                                           319
gcttgggaag tgggaaggg
       1114
334
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 1114 tttttttt aagtatatca acaaagtgaa agatgggttt aatttttccc acaaaagtt
                                                                            60
aaaagaaata acagcagttt tagaggaaga nggaaaaaat aataagaaaa ttacatgcag
                                                                           120
ttgcaaaatg tgtgactatt tacaaactct aacatataac tacaaaacgg accagaagaa
                                                                           180
tcattatcat aggaagcaaa gggtcatttc aaaantcaga ggagggatga ttcatattta
                                                                           240
atttaattet gtgggaaaac atttaagtaa eetttgagga caaaantagg tgatatgttg
                                                                           300
aaatgcggga aaccacagtg ggaagggaaa aaga
                                                                           334
       1115
496
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1115 tttttttt tttttttt ttaataaatt ttattttag cacaatcatt tacccaaaaa
                                                                            60
gagagtttga gaatgttcga gaatctctac cactcggtaa ccatgctggc tgttatatca
                                                                           120
gaaaaatcca taaacataca cagcagcgag ctgttttcac aagacttcct gctaataaac
                                                                           180
acaacacttt ctcctccact cagatgggag cctcagnatg ccaaaacggc aggatgtgcc
                                                                           240
aactaactat agggctcgtt gctaaggcag gaggaaatct attcaagttt gtccaggcaa
                                                                           300
attegattgt acagtgggga tgggcgtctg cttctgcggg ccttgggaca ggggaggcca
                                                                           360
ctgggtctnt gctggctgtt cccctgtagg gcagggtcga ngctgggtng gccctttagg
                                                                           420
agggcaaggg ttaaaatggg tttntcatgg gggtttagga acataagggg ntttttgagg
                                                                           480
naaaaattgn caaatt
                                                                           496
       1116
467
DNA
Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} 1116 ttttttttt tttttttt tatgtgttta tactcaattc ataaatggac
                                                                            60
```

```
tqtcttacaa taaaqqnqat aaaaaatctc tqttccnttc tttttgcttt tcacactttt
                                                                        120
ttnccccata aaaacccact gcagtcatag tcagtagtta ggggtggggg ttggttcaac
                                                                        180
acattctggg tgctcactca tgaacatgcc aaagctatac tgcaacacta gcctgaattc
                                                                        240
aacttagagt tacctcacca tcaaaatcag gtggctggga cgttcttttg tctctgaaga
                                                                         300
                                                                         360
ccaaaacttq aaaatqqact qactttagtg gggaaatttc cttctgcgac agtcattgtc
atgggaactt teetgggget ggggagttet gtteageeaa atteagtetg ggeageaceg
                                                                         420
                                                                         467
gggagcaaat tcaattcatg ggtttgtcca aaagagtcct aantttt
       DNA
       Homo sapiens
^{400}> 1117 tttttttt ttcctagata caattccttt attatcatta tcatgccccc tagcacatga
                                                                         60
agctgggctt ccacctagat cagctaagga caggggtatg tttacaatga gaacaatttc
                                                                         120
tctatgcgca ttaggttaag acctcttctc tgtttctaga atactgtgat gactcacatc
                                                                         180
catqqqccaq ctqcttccaq ggaatccatc tggcctcaac aacattgggc tgcctgggaa
                                                                         240
                                                                         300
taacqqtctq qqcacttgca caggggcagg ggtatggggg agcaggcctc aggtttatta
aggcagggac tggggcactg ctggaaatag ggggaagggg gggcagccaa catgttagcc
                                                                         360
aggttcttcc ccaaggg
                                                                         377
       1118
439
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<400>} ^{1118}_{\rm ttttttt} tttgtgctta gccaagattt attgaactgg atgaatgaat caatggcttg
                                                                         60
                                                                         120
tggaggggtg gggagtgggg gggcagtgag agaccacaca gcacacagaa tgtctaacta
acttqaqqaa ttccagttgc tgaggaggat gtaagcagat tgtttcagag atggataagg
                                                                         180
aaagagatga ctgggacagg gtaggaatca tggctattca tgggtactca ttctatcctc
                                                                         240
                                                                         300
tragtracce treacatrea ataatragte attaagttat catettacet taaragttea
                                                                         360
caccttaaca cctccaatct attcctactg ggcctttgcc ctaggtgcag ggcctcctgg
                                                                         420
ggtctttttt tccagtctcc taggctaatc ttgttcatct tccatttcgg ntctcttcac
                                                                         439
aaatgggatt cactcangg
<210>
       1119
426
DNA
Homo sapiens
<400> 1119 ttttttttt caccttattg catttttaaa atctttattc tgtagtgaat tggtattccc
                                                                          60
aatctgecta agcaaaggca tgeeetteta acaagatttg ettagagcag aggtgataga
                                                                         120
aggaagaatc cgaagacct ctggcatggc aatctgggag cagcacattg ttgatggagt
                                                                         180
                                                                         240
ccaagtgagc acatttcaca caattcattt agtgacaagt gggcttgctc ccttttcatc
caqqaaaaaa actactcaca qaccactqcc caqaatctqg aataagaacc ctcattttaa
                                                                         300
ggtattcttc ccaacaaata aatatctaaa tattgaaagg gggcatatca ggaaaactta
                                                                         360
aaaqqacaca tttaaccaaa accaaaaccc tttttcaaaa caagtaaggc atgtctgtat
                                                                         420
                                                                         426
ttagtt
       Homo sapiens
```

misc feature

<210> 1124

## $\langle 223 \rangle$ n=a,t,g or c $^{<\!400>}$ 1120 tttttttt ttattaagca acatgtttat tggcgttgat gcagagactt acacaagtct 60 tcttttttaa gagaaaaatt acaaggtatt caagttacga tttttagata atctctacat 120 ttgagacatc aaattataaa aggtcagtgt taccccatat gacatttgtt ttaaaagttt 180 aaaggttacc agggtttgca gcttttaaag atatgaatgt cctgggcctt acccctttgg 240 qtqtctqaqc tagcagctgc agagagggcc ctctggaata cacagtatat tttgctatcc 300 cttcaagtta tttaaatacc cggaaacaca aaggggtttt cccttagggn attgtgttga 360 ttqqqqqctn caqqqgnttt aaacceggac caaccntcgg tcttgggggg ggattgtntt 420 ttcaacgngg ccatcttctt gaggnccccc ttctactntc cgggg 465 1121 399 DNA Homo sapiens <210> <211> <212> <213> <400> 1121 ttttttttt ttttttacg cttttactgg ttggtttaat gagagagaac cacttttggc 60 120 cattatcacc ttacqttact acaaatcctq aaaqqaaagc agctttgagt cttgggctcg gctgaacccc ctgcatggac cggggctaac agtaccctct acgactccca caggtctctc 180 tttgtgtcca gatggatggc gactgtgagt cagcaacgcc agccaaggac ttcctcgcct 240 ttaccgtggg cattggggca gtttttcagg ctctctacag agaggaggaa gtggggccag 300 360 taaggggaga ggggctagag agaggacacc agtttacata ggggttgact ttcacttgtg tgtagtagca gtttcaggaa ttttaaaaaag aaattttcc 399 Homo sapiens misc feature n=a,t,g or c $<\!\!400\!\!>\ 1122$ thiththit thiththit thatanacag cogtotith attitudac 60 aataggcaac aagatgggnc tggttttgga atatgttacc atttgtgttt aatttccaaa 120 qacacqcata ttaqctcaac taqtqtaaac ctqtqaaaaa ataqctqaqc catctttttc 180 ctctcctctg ttaatttatc ttgaaatgtt cacagcttag gaaactacag cctgctgggg 240 naagagaggg gagtgggccc ccatggggaa aatgtcccag nctcgctgga aatagcctca 300 314 ccccagnagg ggtt 1123 444 DNA Homo sapiens misc feature n=a,t,g or c <400> 1123 taataaaaat ttattgantt acaagtgatt atttatcaaa agaccattaa tagcaggtac 60 tgaaatgatg tgttactggg tggtgctggg agactaatag gaaatcaatg cagctggccg 120 gccagaatgc atatgagaag cccaccccc ggcagccagc gcaatcaccc ccgcaacaca 180 cgccaggngc cacccctggc gcaatgaaaa gttccccctt tttatttatc gtttacaaat 240 gaaataatca atacttttaa tctagagcaa aatttattaa ctttcccatc ggagagagac 300 atnttgactg ggggagagag tggggtntgc gtgctgtagn aagatgggat ggctgcgtgg 360 ccatatecta acctgtccgc gaggcagttg cacctgcagg ctgncctttc cagnctacgg 420 gccggggcca cngggggcaa gttg 444

1128

```
<211> 212
<212> DNA
<213> Homo sapiens
^{400}> ^{1124}_{\text{ttttttt}} tttttttta tattattta tattttattc aattttaata tggtttccat
                                                                          60
tattaacttt taaaacaaaa tgatttccag tttaaaaaac aatgcactga ccacataatt
                                                                         120
ccttttttat tttacacaqt tatacaaata ttctaaatac acattttgtg ttcaagatga
                                                                         180
                                                                         212
tggcaaatag ggattaactg tacagtacat ag
       1125
424
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{400} 1125 ttttttttt ttgttttaac ttcgttttgt tttattttac attgttttag gagcttacac
                                                                          60
aatcagttct cccttgaatt taaggataaa acttgtcttg tttataggaa aattggtctc
                                                                         120
attggataag atcaaaacaa atcctatata tttttgtcct agctgtcagg atgttcagac
                                                                         180
ctaacttagg cattcaacta tattaatact teccagatgt cagecacatt catttgeetg
                                                                         240
ttatttttta aaattatatt aaaattatgg cggtaaataa aaatgtactc acattctcat
                                                                         300
                                                                         360
catqqqacqa tqqqttacqq gtttaggctt gtaggctagg tggaaaggcc aaatttggtg
ggaaaaggta ttggccnttt atggggnggc ctggtttcta actaggcctt tggccaattt
                                                                         420
                                                                         424
tttt
^{400}> ^{1126} tttttttt taatgatgtt catttattta aacgatctgt atgaatttgg tgattttgtg
                                                                          60
qatacqcccc tgacagacaa ggattcacag ccgacggaag tcagggaggc tccctgcaaa
                                                                         120
ttcttcatct ccgcggggcc tgcccgagcc ctgatcctgc agagccgtgg ggctgaggta
                                                                         180
gccgccggtt gtggtccagg gagtgcgtct ttctggatgc ggggcacctt catttcaccg
                                                                         240
taqcaaccqq qtaccaaaaq taqaaqcgga tttttggaaa atgagtcatt aggtcccaaa
                                                                         300
                                                                         360
gagaacctat tgcaacatgg gactccataa cgttcttgag gatcatcctg aggaaactga
                                                                         397
tgttctctcg ttagacaaaa atggcacgat tttgctt
       1127
413
DNA
Homo sapiens
<400> 1127
ggttgtcatt tattgttttc aacactatct tcatgacctg tttgtgttca gagtggctca
                                                                          60
cagataagga aacatttttg cccagtctta agttcatgga agataatagg aagagtaatt
                                                                         120
aactgcagca aaaggttagg acaaaacatg gcattatcag ggcttgaaag gactttattg
                                                                         180
tqqctqtqqt qaaqcaqqcc ctqqqtcttq qcagatgata ccagaagggc actgagtgca
                                                                         240
qqcqtqcaac ttqaatttga tcccataaag tcagggcatc aggaagccat tcagaatttt
                                                                         300
                                                                         360
teaccetgte agatgeteag atttgetagg agaactetgg gtagtgggea agaaceagag
413
       1128
340
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400>
```

```
60
ggtttccttt ttggtttatt cttggattgg gcctaattta tttttatat ttcaaaaatc
tttcattaat aattattcca ttagggttta gtaactacag actcatttac taatgattta
                                                                          120
ctatgatacc ctaaaaaatag agaaaaaacc ctagaatatg agcgtatgca agtaagtgca
                                                                          180
atttaatata tgaattgcag aaaaatttta aacaagcttt aaaaatatct ctaaaaggag
                                                                          240
gcttaaagtt aattgctgta gcctcctgtc atccacagag aagncaaaat tttaaaaaca
                                                                          300
tcaaacatac tcaaaaacag ggcaaggctg gganagggta
                                                                          340
       1129
333
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1129 nacattgtat ttattttcat gttttacctt ctattgatgg caaatgagac tggttttcca
                                                                           60
tttacagaag tgatacaaaa gattcctgtt gcaataattt cattaagtga ataatgagcc
                                                                          120
aatttaaaga aaaatataaa gcaaataatt ntacagatgg naaactaata tggcaaaatc
                                                                           180
actaatattc aaggctgaag tttggccggg catggtggct catggctgta atcccaacac
                                                                           240
tetgagagat ggggatgagt gggetetete gageeeaggg ntttaaagae eageetgggg
                                                                           300
caacataggc aagaccctgt ntctaaaaaa aaa
                                                                           333
       1130
449
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{400}> ^{1130} tttttttcc catcttaaaa cagtgnaaac aggtaactta tgcttttaaa acaccacgac
                                                                            60
cccttcccca ccccccaaag tccctttcct cctagtatct gggggaaaat ctgcaattct
                                                                           120
gcaaatgtta ctgcgctaga ggttgcaagc agcggagaac tggctgaact tggcaaaagg
                                                                           180
caaggactgg tcaaagcttc ccctttctcc tccttaaaca tctaagtgct ttccagtctg
                                                                           240
tecettggtt ggeettgtte teetgeeaga gggaaggggg tteateatge eettettgea
                                                                          300
                                                                          360
tatccttggg gttgcttcca tccctgtttg atgtctccct catgtctggg aagctatata
actagttaca ggatggtagt gattaaccca cttattctgg ctagatctct agtaaaagca
                                                                          420
taatttttaa ggttaaggag cagtttagg
                                                                           449
       1131
398
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1131 ttatangcat tacntnttta ttcaagctcc acaataacgc agcaaaatac atactgattt
                                                                           60
catatcacca gcgaaaaaac catactcaaa taagttaggn aacatccaac taggagtgga
                                                                          120
tggacaaaaa cctaggettt gactccacac accacactct actggatcag gagaatactc
                                                                          180
tgatgaggtc tcatttccac ttgagtttga agagcctgtc gtttgggatt tctaggaata
                                                                          240
tttagtctaa tgattattcc tttctgtagc ataggatgat gccctcacaa aacagccagt
                                                                          300
gtgggttaat tactacacag ctgtcagctg ccatacatcc taataccnat tatttaatag
                                                                          360
gcagttaaca cttgggngct tggntgcttt acaatggc
                                                                          398
       1132
446
DNA
```

Homo sapiens

```
misc feature
n=a,t,g or c
<400> 1132
aqcaaaaqac atttttatt qaqaaqtgaq qaaacacaca gatcagagaa gcaggttcta
                                                                           60
aagggatcgt atccacagtt attcttgtaa tcaattagcc agaatgaatg gatgttctca
                                                                          120
acagaattet gggacaagaa tgaatgagtt cecacatttt etggtteatg tacaaatgaa
                                                                          180
ttacagactc aaaattctga aaaagagatt accattatcc aacaatgggt aaaatgctca
                                                                          240
cctgtagcta gtggaacgga tacctgaaag acactaccac aggaagcacc ccagagaggg
                                                                          300
qaqqtatttc tccagagaaa acaggggtgc tcatgtcaat caatggacaa caggcatggg
                                                                          360
aactqcaaaa tataataaac qttcattata atqaqttctt cttaaqcqqq ccccctqtna
                                                                          420
ttaaatgcca gttctgctta tngaaa
                                                                          446
       1133
357
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1133 ttttttttt gctgacttta attacaaact ttatttgtca atacaattca cagtttatac
                                                                           60
atggcgcatt ccaccatata aattttcgga acagttattt gaggaaatgg gtgtagcttt
                                                                          120
ctttctaaaa gagcctgact ttctaaaatt ttggttggat tttttttaac tttataaaag
                                                                          180
tacttttaac aaattaattg aatatttaca tttctagctt aaatttaaat tttggaaaat
                                                                          240
aagcgtctat tagtttattt ggcttctttt aaaggattcn ggggtttatt ttttccagga
                                                                          300
ccccaatccq qatqqccncc ttattccqqa taccnqctcc ccaccccca ccaccac
                                                                          357
       DNA
Homo sapiens
<400> 1134 ttttttttta acaagcatgg atagtattct tatgtaaagg tagtatcaat gagaaagagc
                                                                           60
tggaagacag acctagctgt ctgtcaggta gaatgagggt gaaggagatc taggatgctt
                                                                          120
caqqcattqc qcttqaactt aaaaaacagg atcaqcaggc cctgacttca taaggcccat
                                                                          180
aaatacaaat gactagctcc ctttctcaag gtcattgaaa atatacagta gtttcagaca
                                                                          240
tcacatgggt ttgggcaaag ggggcagatt tccaagctag gtcacttaat ggtatctctt
                                                                          300
gcctcaaaat agtcccatca acactaattt aaattatttc cacttttgtt ttaaagctta
                                                                          360
aggttctact cactggacat taatttgagg ctaacagcaa tgtgttttgc
                                                                          410
       1135
424
DNA
       Homo sapiens
<400> 1135
ttttttttt taatgcacca ataaatgttt atttataaat aatagaagtg tacaattgta
                                                                           60
caatatatta tgtacattat aaaacacaca aaaatagaaa tttaaaagga tgagattaaa
                                                                          120
tacaaataat catcttaata cttcctcaat ggattgatca tctccacgcc cctgggatgt
                                                                          180
atacaccccc acctgaaaca atagccctaa agtatgtcaa tgattgttat ttgggttttc
                                                                          240
agctcaggtt acagaaatat gtacaagatc gcatcttttt aagttttgca aaatagccct
                                                                          300
agcatccaag tttaaatggg atgaggaatg cttgggtgct aacttcttga ggacatattt
                                                                          360
gggactaatc cactacacag ctgggtaaaa tgtcgttatg ggttccacca acagttattt
                                                                          420
tcca
                                                                          424
<210> 1136
<211> 340
<212> DNA
```

```
<213> Homo sapiens
<400> 1136 atctcagaca aacattatgt atctttattt aaatttgcaa atgaaaacaa cacatatttc
                                                                            60
atgttagttt taataagaga ttccctatcc tctgccccag taaaacctaa ccaagccagc
                                                                           120
ctgacaggtt atatcaatac agggagctgg agtgggagcc aagggtggtg ttagataggg
                                                                           180
gtggggtaca gatcaagggg gcctgggaga ctcagtgact ggaagtctct gcccctcact
                                                                           240
cttgggtgag tagctaattt cagcagctgg cttcataagg aggagtcagg ggtgggtgga
                                                                           300
ggctcctccc aattccagat ccacttcctc ttctccttct
                                                                           340
<210><211><211><212><213>
       1137
416
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1137
anchtttann nnttccaagt cattagcttt atttttactg aattcagcat gggatgacaa
                                                                            60
aaatgcatta tatcactacc atccattatt acatgtagac atttatcctt gtattcttta
                                                                           120
tatgtccatt ttctacgtta aatctgttaa ccaatactaa ttnaaattac atgatttcct
                                                                           180
actaaaaata tgcagttcat ataagcaagg gcaaataaat cctccttaaa acattttatt
                                                                           240
cctttataat tgaggaactt aacagtctta atgggctagg ttcttaaaaa atgtttatag
                                                                           300
ggnttaaggt ttatttaagg ggaggccggn caaacaaaac atattgtaaa actaggtatt
                                                                           360
ttcccggagg ccatttccct tctctccct tcttcccggc aaacnggggg ttttta
                                                                           416
       1138
347
DNA
Homo sapiens
       misc feature
n=a,t,g or c
accaaacaaa anctttatta atgcattgac aatcagtgaa gacaatgaaa acccaccact
                                                                            60
tttgtccgtg aactgagaaa gaaaatggca atgtcatatg gcattaatga tgcatgagat
                                                                           120
ctatgggtgt agtgtcacgt ctaggcgtgt agtaatccag tcttcggcct tactccaggg
                                                                           180
agaaagattc agetttgtta etttecagte actetetece gtaacacage acettgggea
                                                                           240
cagaaagcag agcgnccaaa acccaggant gagggacagt taaaattcaa cttcaaggct
                                                                           300
acagccatcc caacgggtcc tncccagctc ccgcgggatt ttttacc
                                                                           347
       1139
367
DNA
       Homo sapiens
       misc feature n=a,t,g or c
caggaggtag gaggagatte ttaaatetet gaagagttet gggetggggt tetgggagge
                                                                            60
aaggggctgg aaaatttggg ccactgattg gtcagggtaa gggagattga atcattagga
                                                                           120
tatggaaatt gcattetttg atgatttage ttetggtagg gteetteaga eeagetgaea
                                                                           180
tcagtagttt catcagtatg caggacctga aagantntct cgaagggaaa acttagcatt
                                                                           240
tcataatgtt caagctgtta tctntagagg cagttaaggg gaactataat cttntaacag
                                                                           300
actecacata attetgaagg caatageena acaactttga gggaggggte agecageaaa
                                                                           360
gtgaccc
                                                                           367
<210> 1140
<211> 260
<212> DNA
```

```
<213>
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 1140 tcccacacat attccaaatc ttttagggga gtaaaagcag tgaaaataac aaaattatgt
                                                                              60
tccacatgcc caagtcacaa aatgtattaa atatgataaa gtagcggctg tacaaaattg
                                                                             120
gacaaattga caaataacaa tgggtcagga acactgtatc tgtttgatac aggagtgata
                                                                             180
ttgaaaangg gttctgtttt tactttctct tatttgtcat caaaaangaa aattqcatct
                                                                             240
tccataaaca ggattccagg
                                                                             260
        1141
192
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 1141
ttgtttaatg aaacacagta taagaaacta gaaaatatta cagngaacta tgcatactga
                                                                              60
tgctaagttc tgttttattt catatacatg tccattttat atcacaaacc agtaaaaaca
                                                                             120
tacaaattga taaatgtata ancacattgc acatnggggt atacatgtgt tatgttgggt
                                                                             180
cataatgtat at
                                                                             192
        1142
353
        Homo sapiens
<400> 1142 taaaatgtc aacatcaatg ttaataaaaa tatataatag gctgaattca
                                                                              60
tcaatgatag aataagttgt aattcacttg gaggttccat ctttcaaagt aagcctttca
                                                                             120
tagataaatg aaaatccttt attttgtaga attttaaaga ttgttaaagg ctgggtcaag
                                                                             180
gcaaagccac ctctattaga aggggaaaga aaagcaagat gaaacaaaat atgttatcat
                                                                             240
acatategeg tgtgetatga geatetttet acteetgeea gattgaaaat tetaqqttte
                                                                             300
aacattcttc aggatttaac aagtcaaaat aaaagccgga attcaaatct agg
                                                                             353
        1143
328
DNA
Homo sapiens
        misc feature
n=a,t,g or c
^{<400>} 1143 ttataaacca ccatttggag ggcttatgag caatgtaagt ccacctcatc taattaaacc
                                                                              60
acattgtttt aaaagcttga acagttttca tgcctataag acttgtctga ataataaact
                                                                             120
gctagagcca gaattctgag tgtctttgga gagccagggn ttttatctgc tgagcgcaag
                                                                             180
gggccagggc actcaaagag ttaaagagtg ttcccgcatt gctgggtagg gttaatatca
                                                                             240
cagctgcctg ggnaaaggca ttatccccgt acctcacttt aacaaaagcc tccttttggc
                                                                             300
aaacagactc ccactttccc cgcaaggt
                                                                             328
       1144
355
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1144
gctaattaat agctttttat tttctcattg taatattttt gagctccaaa ttattacagg
                                                                              60
```

aaaattatgc cctaaactcc	aacttttctc	ctatctttt	tcggatgttc	tgacacaatg	120
acaaactgag gcaagacatt	aagcactata	tcatctgcca	gtctgtttat	aggngtaccc	180
tcaattcttg aatgttctaa	cttctaggca	gcagantaac	aaaagggcaa	ccctggggct	240
tgggcaggct tcaaacaggg	aaggaaaggc	aaggggctaa	ggtacccagg	ccaggcatag	300
gctcagggct ntggaaaggg	caagggcatg	ctaggggaaa	aaggggagaa	gntgg	355
<210> 1145 <211> 220 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 1145 gtagttgtaa aacagatttc	attgtgttat	acatcacttc	ataaagtaag	catagttccc	60
attettecae atgatgettt	ttgcagcatt	gtaccacaga	ataatgactc	cctaataact	120
cagctgaaaa atatttagat	ctacttgctc	taagnntaag	gncaacatta	aacattctca	180
gatgaaaagc ttgctggatg	aaatagtgca	ccatcagaat			220
<210> 1146 <211> 319 <212> DNA <213> Homo sapiens					
<400> 1146 tttcacagat acatatatat	acttttaata	ggaaattagt	gctcaatact	ctgccctttg	60
tgtgggggaa aacattcttt	tatacaagga	tttttaccta	gctattacaa	tagtttaagg	120
taatgtacaa tatatatttg					180
aatcctctag cctttgatgt					240
ctacatattt tccttccaca	atatggattt	gtgtcattta	aactgaagaa	gttggatctt	300
tgtggtgatg acagggtat					319
<210> 1147 <211> 299 <212> DNA <213> Homo sapiens					
<400> 1147 tttatagagg agactgaaaa	agataattta	ttccatcaca	ggcatcacaa	ttacacatta	60
cagacatttg caagtaaata					120
catgagtaaa cagagatggc					180
gccttttgag tctaagatga					240
ttgtcaatga gaaatccctc				-	299
<pre>&lt;210&gt; 1148 &lt;211&gt; 362 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>			J	3 33 3	
<400> 1148 ctcctgggtg acctgtctga	ccatggctgg	agaatcagca	cagcactccc	ctagcctcac	60
ctcttccccc atttggctgt	ggaaatggag	aaacacagtc	acctctgaac	ttctaaacct	120
agaaacagaa ggagactgta	cacaggggaa	tacagaaggc	agtctgggat	gatgtcacta	180
tagaatgact gatgaaaaat	gcagattgac	tgttctgacg	ctggcttagg	gcctggggct	240
gaagctgggg accttgagca	aggccctttg	actcctgtga	tctgtttgcc	atgttgccaa	300
tgaggaatag gaacctgctt	caaggatctt	atgaggacca	ggggagggag	gggtatggaa	360
ag					362
<210> 1149 <211> 342 <212> DNA <213> Homo sapiens					
<400> 1149 tcaatttctg tgcaaactac	ttttatttat	aaggaaagtt	tctctatttt	gtttataaac	60

```
attaaaccag agctgtgtga aggcacttaa ttggggagag gtggggcagg gatcctqqta
                                                                           120
gagaccaatg tttcccaccc agaccccaag actgctggga gagatggtgt cagcagtgac
                                                                           180
teccaggaat atecagtggt gtggtggeee ateccaggee eggetgggag tatggetgge
                                                                           240
ttgctggggg atgtgatgat ggtggtaggc atgggaggca ctttggacgg gatctgattt
                                                                           300
ggcaaaagga agtggtttcc tgtccccagt gatttccagc cc
                                                                           342
<210><211><2112><213>
       1150
415
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1150 tagagacagg gtctcgctct gtctccaaag ctggagtgca gctccatcat ggttcactgc
                                                                            60
agcetcegne teeegggttt gagegateet eecattteag tgtaaceace attettatet
                                                                           120
ctatcaccat agattagctc tgcatgtctt tgaacttcat ataaatggaa tcatgcatag
                                                                           180
ataggetett ttgtgtetgg attetetetg ttaacactgt gtetgtgaga etcactcatg
                                                                           240
ctgtgtgtag tattatgctt catccttttt tgttgttgca tagtattcca ctgtataaat
                                                                           300
ataccacaat ttatttgtct gttttcccaa ttgctgtgca tttgggggatt gttttggttt
                                                                           360
ttcacctatt ttggaataag gctgcctagg gaccaccctt ggtatagggc ctqqq
                                                                           415
        1151
460
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
^{<\!400>} 1151 acattcatct tttattcttt tcttatgaat tatgggggt ttcttggtac ccatcttta
                                                                            60
aaggacteca etecattitt etgegtette aatetgttat tteetgette cattgeette
                                                                           120
tgaaatgtaa cagttgcact tttcagctga aaatcatctt tttcaatctc agaggatgcc
                                                                           180
tttttcaggt atacaataaa taccccctcg aatcttaatg ggcacacaaa ttggagattt
                                                                           240
ttctaaagat ttctgttgat tctgggtagg gaagtttgtc tcaaggggaa acatttgtgt
                                                                           300
tgatteettt atgaggaact getgaggtet ttteacaggg cecatgggtt tteeteeett
                                                                           360
ctcttattct atatttgtcc catccctgag gggttgagga gggggagccc tgtntcccaa
                                                                           420
tcttccaggg gcccaggatg atggggagtg gggagaggga
                                                                           460
       1152
298
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1152 cttcaacaca gcagaaattt atttcccacc caggtaaggg gaccctgagg taggcagtga
                                                                            60
cttctgtcgg cagcgaacta ggccctctca ccaggctgcc ctaccgtgct cagtqctqcc
                                                                           120
tcatggtgca aagtggttgc tgagctccag tcatcacttt agccngcnga anggggaagg
                                                                           180
gnangggnaa aannttteee eecenetngg gggatttett tnennneece cagtnaggat
                                                                           240
tttgngttta ttataaggna agaagagaca gttagcngag gcttccctgt ccaccagg
                                                                           298
       1153
436
DNA
Homo sapiens
```

misc feature

```
\langle 223 \rangle n=a,t,g or c
<\!400> 1153 ttangtattt tgaatagcat ttgatttatt tttttctctt gtttgagaca ggttctcact
                                                                             60
ctgtcatcca ggctgagagc agtgtctcag ccatatctca ctgaagcctc gatctctcgg
                                                                            120
acttaagtga tetteecact teagegtetg gagtageatg tgeatgeege ettgtteage
                                                                            180
taactttttc acttttttgt agagatggga tcttgctatg ttgcccaggg ctgggtctca
                                                                            240
aacteetagg geteaaggta ateeteeege eteageetee egaaggtget agggattaca
                                                                            300
gggcgtgaac ccaacacatc tgggccagta ttttatttgt ttaacaggca attctggggg
                                                                            360
atcttcccca ttatggctgg ggggagnctt cttggtccca tggaattccn ggcatgcact
                                                                            420
ggggggttc cntggg
                                                                            436
       1154
552
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<\!400\!>-1154 ttacaattga aacaggtett tatttacaeg gaageagaga gacagagga tgagggeagg
                                                                             60
caccccaaaa gtgacttcac attcaccaat gtttcagtgg cttctaagac cacagcagan
                                                                            120
gnatneentg ggaeteacag ggtatgaaaa tgtgttaece tecaaageet caaaacaaaa
                                                                            180
gggttggatt aaaaacaaat accaagtgtt tctggcatca gttgaaaaag atctgagaaa
                                                                            240
gaggaactat tgaatgtcca gaaaaatcaa agttctggga ggctaggaaa tctgacattt
                                                                            300
ctctgataga gagatcactg ggtcatcagt tcattttggg gaaattcttt acagttaagg
                                                                            360
tgatgtgttt cctttcattg gtaaatttaa cagggagagg catcattatg gggatacatg
                                                                            420
cagggctcgt gccgaattct tgggcctcga gggccnaaat ttccctatag gtgagtcgta
                                                                            480
tttaaattcg gtaatcctgt ccataggctg ttttccngtg gtggaattgg ttatnccqct
                                                                            540
tcacaatttc ct
                                                                            552
<210><211><211><212><213>
       1155
472
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1155
tttattgaca tgatgcaaat atctttattc gtacaaataa cattcaagca tatcattcag
                                                                            60
tgttgcaata agttaagata agctcctttc agagatgctg ggaaaggctg gcttttgctc
                                                                            120
caaaacattg ctccctaatt ttggctcctt ctatacattt ccactaaaag ccttgcccgg
                                                                            180
agcaagaagg aagettacee tgeecaceee teattgeeee tgggteetgt teecetttee
                                                                           240
aatgctagca gtaggggcaa gaggggaggt ttattttcaa cgtgaaactt taactatatt
                                                                           300
taatteette taccaaagee tgeattaagg getaaatgge atttacaaaa cattacatae
                                                                           360
ecgcaaactg ttgaggatag gtgaggcatt gtttttagge tatttcatet etttnggtca
                                                                           420
aaaaaatata tatagggcct ggaaaccttc acttaggtgg gcggatttta ct
                                                                           472
       1156
495
       DNA
Homo sapiens
       misc feature
n=a,t,g or c
gtggagatgg agtatgtatt tattttacaa aaataaatca ccatcttcgg accatttgta
                                                                            60
gactggaaca tttcgagcaa tgagtgcgcc acacggacga gtgccctggt gactccctga
                                                                           120
```

```
tqttcqcqtc acccccaqqq ccaccttqqc qcccqcatqa qcctcqnttc ccactcccqq
                                                                           180
cctccaactc ccttccctcg cagccgccat tcaccttctg ctgtttattt gtctgcaqan
                                                                           240
gcctgggaca ccggaaaagg cgattccctg agcgcctggg agttggagac aattcctqqt
                                                                           300
tcagaattta aacatctttc taggtaagcg ntgctccaaa actcttcgcc gcgtgggact
                                                                           360
tttgcaccag gggcggttgg ggagganttg gccctccacg gttcctgggc aaccgcggcc
                                                                           420
tttttgaaag aggttctggt caatatttaa cttcggagga atttggaatt ggattccttt
                                                                           480
aagttcttnc cctgc
                                                                           495
       1157
252
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<\!\!400\!\!>\ 1157 ttntttttt caccaattac aaaaaggett tattatattt tgccaaatgt taategett
                                                                            60
cattatgtct ccaaacatta tttcaccact catttttata acaagtgcag tgaagatatg
                                                                           120
cttatcgaat attgtacaat actgttgtgt tctgtaacac tctttcggga acagcttaga
                                                                           180
tgtaggtaac aagagatgcc ngcgtatgaa agngcttcat aaactgtact gtataaatgt
                                                                           240
aaactactac cc
                                                                           252
       1158
422
DNA
       Homo sapiens
<400> 1158 agcaaggttt taatggaaag cataaaacac tggaaatatg gacagaaatc agattattac
                                                                            60
ccttttattt ttttccctgc ccctttcaca atgagactgg aggggattca agaaccactt
                                                                           120
gaaataaagg cgaaatgatt agattttttt ctcctaattg cctaacqctq atqtcatqqt
                                                                           180
gtacgcaaaa tcaacattga tctctaagtg aaagaggaga aacagaacaa catcaacagc
                                                                           240
ctttcgaggt aaactgtggg gccagaatct atttagggca acccgcaggg cccaaaatct
                                                                           300
ctggaaaagc ccaacagtgg gagccagttt ctggatgctc ctctgttggg tgatctggat
                                                                           360
ctttgagtgg ggggaaatct ggttaggaaa cagcctcctc gaggggagcc ctcccctqq
                                                                           420
gt
                                                                           422
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1159 tetttattgg aaggaaatgt gttaaagaca gaeteaetae agtgttgaga cagtagtgag
                                                                            60
tagcacagta aggagactgc ccaggacttg aggtccttgg tccctctata qaaqtatcaa
                                                                          120
gtgtttgtaa aaggtttagc acccatgtga cagaaagaag ccatcatcct cttaatttct
                                                                          180
cttgggtttt acttaatata tagaagggca aactagtggg gcctctgagt gcaagatgag
                                                                          240
ggacttcatt aggaataaag ncatattgcc tctggggntt ttctaaccca taggctccaa
                                                                          300
ggagccctca ggtgtcagga acataggggt aagggggact tggatttact gaggaggacc
                                                                          360
ccctacccct accaacatcc tgtggggaca ataggag
                                                                          397
       1160
434
DNA
Homo sapiens
       misc feature
n=a,t,g or c
```

```
<400> 1160 ttttttttgg ctatcaatat atttattatt agcatgacat attatgaaaa attattttcc
                                                                           60
aaagacttag ccagtaacac tacaaaaata gaaagcccgt taattcctgt gaatttatct
                                                                          120
gtgtgtgtcc atgtccagta attatttcac tgtctgtctg aagtactaac aatactaaat
                                                                          180
ccaatgctcg gcgccacgct gcaatctttg gtgtaacaac gtcataaact ctcggaatct
                                                                          240
gctccagttt atttgaaatg tctgaattaa aaattctact atttagttta ctatattcat
                                                                          300
tcaagatgta agatgaagga gagccagagt ctgtggcatt ttgcagatga tgttgaatgt
                                                                          360
atgtgctggc ttcaaattct ggatgagtaa ttggcagtgg tatataggag agttggaaag
                                                                          420
gtatttcngc catc
                                                                          434
       1161
387
DNA
Homo sapiens
^{<400>} 1161 taaatgaccc aagatataat tetgattgtg gtetggatea taaaccegca teacatttta
                                                                           60
aatgtctatt gtcttggaga caataagctg ttttatgggg gaatgggtgg gtggaaaaat
                                                                          120
gggagcaggg cttctgaagc tgactaatac ctgaagaata cggcaacgtg agaaagcact
                                                                          180
gacceggetg etttggtaaa tggaagaaaa teateteagg gttgetagga acatgggtaa
                                                                          240
gaccagactg tagaaagatc cttcaaaaca aaacagtttg ccattccttt aacaattact
                                                                          300
aaccgtcaag aactttggaa ttgtgccacg gaagacagag cttaagatgg ggtggagccc
                                                                          360
tttacctccc acttgctccc ctgggcc
                                                                          387
       1162
471
DNA
       Homo sapiens
^{<\!400>} 1162 ttagagttgt gagtgaattg catttttatt tacgtttaag agtctctctc cctccttgtg
                                                                           60
ttctagtctg tgaatggctc acacttggac ttagtgtagg ctcctatggg aggagcgggc
                                                                          120
ggtagtgaga atcttcatca aatggagtaa catgacccaa atctctagag gtttcataat
                                                                          180
tttgctcttg cttctaaaaa cataatcatc tcttatgggg tgttatgtgc tttgtatcct
                                                                          240
gaaattttcc acttgctgct tcttggtgtg aggcgagaaa tgccaccacg tgaacttgca
                                                                          300
ggaggagact ggtggaagcc acagggctag gccttcactt cccagtgaca ctgttcccaa
                                                                          360
ttccctccag gataagctga gactcctcca ggatgtggtt ctgcagcaga tgaggtgcga
                                                                          420
acaaagcctg ctctggcctg ggcacccagg atggcactga gttctaaaag g
                                                                          471
       1163
419
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1163
ttttttttt tttacaaaaa gcaacaagag tttaattctc tttttacatg gccacaggtc
                                                                           60
tetteagtea ggggaaette agetggtgee tetetettge agetatgagg egacagtgtg
                                                                          120
gtgacatgcc tcatacagac tgtcccagta agccaggaca agtcaccatt aaaatcttqc
                                                                          180
atgaacagcc ctgggcacgt gggaatgtta agaaagagcc accgcctcct tagtcagctt
                                                                          240
aaccacagct ccaaacgcag tttgtcccag ctggcaaacg cctcaaacac caatcatgcg
                                                                          300
tcgtgctcct attctgggtt ctttataaaa cacttttata tagcgntata gatagcacag
                                                                          360
taaatgtgct tctgatgcac tctaacatag aggacaggaa tacacactgt ggggcgcgc
                                                                          419
       1164
385
DNA
Homo sapiens
```

```
misc feature n=a,t,g or c
<400> 1164 caatcatcac atctgtgtat tgtctcaggg tcaatttttc agtaagaatt ccagacattt
                                                                         60
ctcttcgttc acattacagt aaactatttt tcaatacatt tcctccttga ctttcaaggc
                                                                        120
ttgaaagtca aagactttcc tttcactaga tctcataagt cataactgct ctcaaccaga
                                                                        180
tgcaggagta attttgtata aaagaacaag ctttttaaag tccaataact gtatctttqq
                                                                        240
300
caaataactc tcctcctaga aaaaaagggc ctggggagcc ctgggctagg gcngqccaqq
                                                                        360
qqaqqqaaaq ccataaataq qqqqq
                                                                        385
       1165
498
DNA
Homo sapiens
<210><211>
       misc feature
n=a,t,g or c
<400> 1165 ccctccacaa cggaggattc ataagagcag gggccctgtt tgttttgttc atgctatatc
                                                                         60
cccagacctg gcaccaatta ggtgacaata catatttgtt gaatqaatqa atqaqaatqq
                                                                        120
tagtcttttg gttcccaggt ttattgacaa ttactcatct atttttgact ccccgagtcc
                                                                        180
cageteceaa actegetete ectaetecag getteaeggt agteceagaa tgtaggaagt
                                                                        240
gggacaggat agactttaac atcacccagg cctctggttt ccaaagcatt ttttttcttt
                                                                        300
aatgcagtaa aaccatteet ttaaaaeeeca aaatetetea tgggaaeeee taegtateaa
                                                                        360
atatataaag caggagetge eettgtteag ggataatatg tggggettat ggetetaaga
                                                                        420
aacacagttt gacattcact gctctcctta cttcagttac ctcatggtat agataaatgg
                                                                        480
ggctgggccn gaagaggg
                                                                        498
       1166
265
DNA
Homo sapiens
<400> 1166 gttttttaac attttaattt caacgtgcca gcatttgtcc aaatgagatg atacaggcta
                                                                         60
gaatgcacgg cggaattcca gactggactc actccataag ccaactcatc actqcccqtq
                                                                        120
aacatgaatt ctggtcctca gagaagctga cattgtttcc ctgaacattc ccgtggtctc
                                                                        180
cctctgaaag ccgatgacca tccaacctg actcacctga aatatcctac gagcatcqcc
                                                                        240
ctccgagact gacgattatt aacca
                                                                        265
       1167
434
DNA
Homo sapiens
<210>
<211>
aatcaaagta aatttatttc tgaattacat aaggatcatg aaacagaaac attaactctc
                                                                         60
atgttataaa aacagtagta aaatacagta cacaggaatg tcaattgaat gacaacaatg
                                                                        120
aaagtacaat agcaaatgaa aaatagtaac ttttaacttt aaatacaaag tgaagcaatt
                                                                        180
taatatgaaa ttttgttaat aagaaaaata tatgtcccat gtctttatta catactgtac
                                                                        240
aaaataaaat attgcacctt tcatataata aatatataca aagagtatgt tacaaatcga
                                                                        300
tetttetttt aatttaataa eetteaacaa teagatgtga ttqqatqatt aacaactaat
                                                                        360
cgggctgggt gtgtcctcct cactgtcccc catccattcc caatcaccaa accctccaca
                                                                        420
tacagtagtg ctca
                                                                        434
       Homo sapiens
```

```
misc feature
n=a,t,g or c
<400> 1168 cttccaccag acattaattt taatgaggtt actcaagatt tcccctttct tcaagcattc
                                                                            60
caggaatcag atggaggaag atagggtaac atcatcttta tcaaatattt qcaaacatta
                                                                           120
tatagatagc tggaaaagcc tgtgcatggt cgaatggaag agatgtcaca taaaaccgaa
                                                                           180
taactgagtc tcataatatt taggtcttga atgaagttag gccttgatct gcttccagcc
                                                                           240
agttgatctc ttaattatgt aggctgtgca acaangtttt tqqttctqtt ttataqtttt
                                                                           300
cttctctcgc attcctctag atttaatata ttccctgatt tgggtttaca gatcactgct
                                                                           360
tttcctccag aataagccaa tgtggataag ggagaccaaa gggaa
                                                                           405
        1169
421
DNA
        Homo sapiens
<400> 1169 attotatata gatatattta ttattatttc tcaatttaag caccattcaa ttcttctgga
                                                                            60
tccattctgg ctggaaaata tccctaaatc cacaggatgt tatctattta atggcacatg
                                                                           120
ttaactgaaa atgaggtgga tttttttttt aagaaaagac cttaaattaa tttctatcta
                                                                           180
catcttaatt ggtttgtctt ctgagccagc tcacaatgtc aatgcaattt ctagtgcagg
                                                                           240
tgtctctgag tgccccttga ccacaccccg aggattgtgg cagtgtcctg gccatgtgtc
                                                                           300
ggaaggateg aagggeagea ggtgeageet tgetetgeae atgggaeage agetqqqetq
                                                                           360
gtccaccgcc acgcaccttc agcagtgtac ctccggcaca agttccacca ttctqcttca
                                                                           420
                                                                           421
       1170
206
DNA
Homoomo sapiens
<400> 1170 atagttgtgt gcaatttaat gaacacaatt aattttacca ccattttaca taaaaggaaa
                                                                            60
ctgaagtgca tttcttaggg tcccactgta agttgagggc ttgagattcc aagaaaagtc
                                                                           120
ttatttcaga gctcagtgtc ttgcccaaaa cgcagcctca ctgctcaatc acattcttga
                                                                           180
ggtttgattg gctgaaacgc acgtgg
                                                                           206
       1171
286
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400>
aaaatcagag actatttata ttaaataact cttcccttaa aaatggcctg accacagcaa
                                                                            60
tgaatctgta aacacagagt aatatttttc ctacagtaaa gagtcacttt aatctcaaaa
                                                                           120
gatacttttc actgttctaa atgacaggnt tttaagcatt ttttcctata tataatacaq
                                                                           180
catcacttaa aattttattt aaagacagtt gattcaggcc tgccttggac tggaaagaag
                                                                          240
tctttaactt agtgggatta gtgcttcagc ttggtcccaa atattt
                                                                          286
       1172
284
DNA
Homo sapiens
<400> 1172
cccgattctt tccttttatt tgccaatttt tatgagtcag tgccttacaa cttccaaagg
                                                                           60
taaacatgag gcttctttcc ttaagcatca tcatgaactc ttagatgttc atttattcaa
                                                                          120
cacaaactaa aaaaggaatg ttaagtctta agatatcatt aatactaact tgcattactt
                                                                          180
gtttatgaag gattaatata ctaaatagaa tatatgctca catttttata tqtaqatatt
                                                                          240
```

aatttacaag taattaacat	gctaaaacat	tttataattc	gctt		284
<210> 1173 <211> 348 <212> DNA <213> Homo sapiens					
<400> 1173 caatgctggc gtgccattca	ttgaactttg	acctaattaa	tcatctqqaa	acctqttaca	60
atctttaatt gatagcactg					120
aaacagcagc ggttccttaa					180
gcatgacaag aaaacaaacc					240
aaaccagccc ccctcccaca					300
aggccatagc tggttttctg				-	348
		_			
<210> 1174 <211> 313 <212> DNA <213> Homo sapiens					
<400> 1174 acacagaaaa aaaaaattta	atattcaaca	tocaaaacaa	cctttaaaaq	aaacatqaaa	60
tcataaagca aagctaacag					120
gtgggagagg gttaataaag					180
gcatactgag ctatccagtg					240
agtcataatt catagtgaag					300
caaataattc att		33	J		313
<210> 1175 <211> 251 <212> DNA <213> Homo sapiens					
<400> 1175					
cagggaaggc agagatgtgc					60
agctgttgct cagcacaggc					120
aggccttgcc tggcccaacc					180
cttggcacat tggcatgggt	gtgggacagg	taaagcatgc	aagagggaga	agagggacat	240
aaggggcatg c					251
<210> 1176 <211> 321 <212> DNA <213> Homo sapiens					
<400> 1176 aaaacaaaac attttattta	atgcagaaat	tctaaggtac	aaaaacattt	tgtaaatgtc	60
agctgtgatc tactttcacc					120
caatgtcaaa aatacagcac		-	_		180
cccacaaagg gcaaactcaa					240
cacaggettt eteceetagg	-				300
taaaaaatta acagtaaaaa					321
<210> 1177 <211> 451 <212> DNA <213> Homo sapiens					
<pre>&lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>					
<400> 1177 tgtgttaaga aatttttatt	ctttcctttg	gatttgtgat	gaaagcacat	aaaattacaa	60
gtggaagaaa catcatgcca					120
ttttaaataa tttgagatag					180

tgtcctatct ttttttctt	cttaaaaggc	aagagtcaca	acgtccaatc	catcacaaac	240
aatattaaca cagtgcacaa	gcgcaacatt	aaattcaaag	taatgcaagc	aaatggccct	300
ttttttggga attacttaat					360
tggatactca aattttaaaa					420
agaaccttgg aaaattgggn			555	J	451
agaaccttyy adaattyyyn	ccacneggge	C			
<210> 1178 <211> 278					
<212> DNA .					
<del>-</del>					
<400> 1178 ttttttttt ttttttca	cattctcaat	atgctttatt	caacagaaca	aaagaaggca	60
aagagagcag agaaagcagt	gcaggaatgc	agactgcatc	agaaggtaca	tcacttgcca	120
ttcagggaca ctgcaagaga	agatcaggac	aactgacttg	tcagatgaga	actcctgagt	180
gtagctataa tgggcaggat	ggttagcaat	taaagagagg	actcctcatc	tgcagctgga	240
cctagactga gtttcagttc	ttatggggat	ataggtca			278
<210> 1179 <211> 386 <212> DNA					
<212> DNA <213> Homo sapiens					
•					
<220> <221> misc feature <223> n=a,t,g or c					
(223) H-a,c,g of c					
<400> 1179 ttttttttt caggctgttt	aattttatta	aaaggttcaa	atttgatgat	aaatggtggc	60
atggttactt caagcttcgg					120
actgccatcc ccaccaggag					180
aatgatttct tgtactttgg					240
					300
gagaatacta acttggtggg					360
agcaatttca gcaggctgac		acagicicag	gganggaaaa	ggggccince	386
ctctggaaan ccatcattta	acntca				300
<210> 1180 <211> 329					
<212> DNA .					
<220> <221> misc feature <223> n=a,t,g or c					
<223> n=a,t,g or c					
<400> 1180					
tttttttggg atgcagcact					60
tctgcattct ggctgcagcg					120
cacactggca aggcactggc					180
acaactcaca gatgtcctag					240
gcccagcatg tgtgcattgt	cacccaaaac	atcttgaaac	ttgccattag	tgaggcattc	300
aacaaagaag taagctaagt	gagtaggaa				329
<210> 1181					
<211> 661					
<212> DNA <213> Homo sapiens					
<220>					
<220> <221> misc feature <223> n=a,t,g or c					
4005 1101					
<400> 1181 tacaaaagaa agagctttaa	ttggacttac	agttccatgt	ggcttggaat	atcttacgtg	60
aatggtagta ggcaaaaaga					120
ctcattaaac ttactcacta					180

```
atcacctccc accaggtcct tcccacaaca cgtgggaatt caagatgaga tttgggtagg
                                                                          240
gacacagcca aaccatatca atgcctctat aaacccacca ggaacacttc tagaaaatgt
                                                                          300
tgaacacctc cgaggcccca cagaaccctc ctctacccac atcttcatgg caaggagcta
                                                                         360
ccatggatcc ccctccgagt gtgcccagac cagttacagg actggttaca gtggaaggca
                                                                         420
actgagaggc atagagcaag agctgccctc ccactaaagt cacaccaccac agaaagaact
                                                                          480
cattetteat aagaagaetg gagetaetga aaaagggaea gaeactaget geeaaaaeet
                                                                          540
ggctgaagtc cacaacatca catnccctca tctcagantc acacagggtg ctctctacan
                                                                          600
catcacactg gtttacttca gagactccac acacactaag attcctggtt aattggttgt
                                                                          660
                                                                          661
       1182
431
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1182
taaatgggaa caaagaaaag aaaacagcct cagcctccag ccttcccttt tgggacctgc
                                                                           60
ctcacaatgc accetetett ccaggcactt cttgaattac agaggaaaca acagtgagtg
                                                                          120
                                                                          180
aqtccactat ggagctacta ccaggttggt ttaatttgca tgggtcccag acgagtctca
agggcccagg agggtcaccc acgctgtcgt ctcttccgcc cccgcagctt cagccgcctg
                                                                          240
gtggcaggct gacgggctgc ttcccaaact tctccatgat ctctcggatc ctggccatgt
                                                                          300
tggttttgct aagtgtgaag tcacaccttg tggcccccat gtcatagcca accatacagt
                                                                          360
tcttgggtgg atgcagtgaa accttcggcc tttgctgtga ccacatactc tccaggggtt
                                                                          420
                                                                          431
caggaaggcg n
       1183
424
DNA
Homo sapiens
       misc feature n=a,t,g or c
<400> 1183 cggagaagtg ccaagtttat tagagtgaga gagtatcacc ctcacattgc caccaacaga
                                                                           60
catagatete agagacaeac tgacettgea ceataattat ggtgaattte taggttagaa
                                                                          120
gataccttag aggtcaccgg gctgaccctc ccatctgatg tgttaacccc tcttaaacat
                                                                          180
ctccctccag gagactgagg tgagattctg tttaacatac ggctatcact gaaactctgg
                                                                          240
ccagctctga atctgcaccc tggaggcgga gaatgtttaa gcactataag gcagtagaag
                                                                          300
                                                                          360
gaaagtteet tggeteagge eecaatggte eeectttttt taatngatga aaggtteeea
gagtccagtg caaagtccct cggaaatccc ccccancaag cacaaagcac gaaaggaggc
                                                                          420
                                                                          424
ctgg
       1184
471
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1184 ttttgctgga acgttttatt aagttaagag gttcagggag cagaagagaa acaccttttg
                                                                           60
qqtqqctctq qcqqttctqc acccagcaca gcctcqaagg agntqtggnn gccatggagg
                                                                          120
                                                                          180
caqctgctag ctccctctgt cctgagcccc atggtacggg tccaaatngg gcaggaantg
ttagtaggag gtaangengg aaaaaggtng cangetneeg getttteeen ntaaanaaae
                                                                          240
                                                                          300
cccnccattg ntgnttnctn ggncttcgcc anaactnttg ggcaagggca ccancttnan
```

```
aaanccaagc anaagggtng ctttgaagac anaaagggga cccaagggtt ttggaagggc
                                                                            360
acacaggece acceaaggaa atttggeett tttntttttt ttttttta aaagnataaa
                                                                            420
antgtttttn ggaaaaaaaa gggaaaaaaa atttattata aaaaatntcc t
                                                                            471
       1185
447
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1185 cctttcagtc tttatttgca gcaaactacc actttatatg acaggtttgt gtgtctgtac
                                                                              60
acgcacatac acacacatat cettaagete gagacagggt geggetttae agaccaaaaa
                                                                             120
gtatggaagc ttggttttaa ctggtgttag agatcagatg gagaggaagt gcagcggtgc
                                                                             180
tcacctggcc gctcggttct tcagggagac agcgctgctg gtgccgctgt cggctcanca
                                                                             240
gcctcaccat cccccagggt gcatgctgtc gtggccaggc gcaaactacg gcgggacatc
                                                                             300
cgtggagaat caaatacagg gtccaatttg tgctccgtct caaaatccag agcatctgaa
                                                                             360
gaatagctgg aactggagcg catacgtgta gcccgtgttc tccggcacac actggggagg
                                                                             420
                                                                             447
actgtacatg tgaagccgag aaaaata
        1186
246
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
<400> 1186 gcaagataag gcactttgtt tttaattcta tcagtctctt tagaatgaac gaaggtctgg
                                                                              60
gtcctctgga aatctcaagt ggtgctgcct gcanttntaa aaggctgagc acaaacccat
                                                                             120
                                                                             180
cagagageca cagtectaag tagaeteete ggtgegetet geecaeetgt ecatgtgeat
tcagatttct cattaaattt tccacagcat gaccagtggg gatgacctgg gtggccgttg
                                                                             240
                                                                             246
tntcca
        ĎŇÁ
Homo sapiens
        misc feature
n=a,t,g or c
<400> 1187
aattttgaaa tgtttatttc aaagagcgtt ggtaatttaa acgtcctatt taatccccaa
                                                                              60
aacagtcctg agggggagat aaggcagtta tcttcatagt acaggaaagg aaaaaagcga
                                                                             120
gggtccaagg ccgactatac cctcagctcc attagccccc gaggcctccc tgacaggcgg
                                                                             180
ggcggacaat cccagtgcag atgctctgta tcgatcgcat gctatcggtt ctttcaagga
                                                                             240
acgtgtattg atcatcaatt aagtggtgag tactcctcta gatgtcgatt cttagcaaac
                                                                             300
tgcggaaact cctacagaca aaaactcagg tgtgggcgca gaagggccgg ggatgcgctt
                                                                             360
                                                                             387
cqqtcaaqac tttgaaggtn cggggct
        1188
563
DNA
Homo sapiens
<210><211><211><212><213>
        misc feature
n=a,t,g or c
<400>
        1188
```

```
tttttggaag acatctattg catttatttt ctaaaagaaa aggcatgcct gaagggtcgc
                                                                          60
attactgcac attttaaaca tggtgacagg ctatcttcta aacctcaagg aattctgctg
                                                                         120
                                                                         180
atgcaaactg taatgactat ctgctcctat taaacaagca agacatcagt gagcggagac
atcacaagcg gttacttcat ttctttctgt tgcttccagt tgctagcata gttgcaactc
                                                                         240
gcataaatat atttaatgta tccatgtaga ttgtcaacat cgaattgatg ggatcatact
                                                                         300
tttgagctcc atacatgggt gttatttctg cacgtttgat tactttctga gtatcataca
                                                                         360
gaaggaacat gctgaaaaga actaatccac catacattgc cactgagtac agagtggcac
                                                                         420
cagcccagga ggtaggggga agaaacatag accccngaga agacgccaag accagaccca
                                                                         480
ggccacttcc caggggtgct cccatgttca gaacttctca ctangcgcac acatnggccn
                                                                         540
cagtagagag gcctcccncc ata
                                                                         563
<210><211><211><212>
       1189
403
       DNA
Homo sapiens
<400> 1189 gtgcagtggc gcgatcttgg ctcactgcaa gctccgcctc ctgggttcac accattctcc
                                                                          60
                                                                         120
agecteagee teccaagetg etgggaetae aggegeeeae caecaegeea agetaatttt
ttgtattttt ttagtagaga cagggtttca ctgtgttagc caggatggtc tcaatctccc
                                                                         180
aaccttgtga tccacccacc tcggcctccc aaagtgctgg gattacaggc gtgacacttg
                                                                         240
                                                                         300
tgcctggact aaaacaatgc tttctaaagc gcattctgca gcctgatgtg cctgtgaggt
gagaggtgtg ggagggacag aagctttgtt caaagaggtt tgggagaggc tggatactta
                                                                         360
gctcccttct tgtaagtttg ccacacacat tggcatatta aaa
                                                                         403
       1190
323
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1190
gtgacatgtt ttttgcttta ttgaaattct ctcttacaaa aggtctgang tattttaggc
                                                                          60
caggcctaat ttgctttggt ccctgaaatg caggcccatg gtcatttcca tgtcctctga
                                                                         120
agtaggtatg taaactagta gacttccatt tttaaggttc acacactttt taacattgtt
                                                                         180
tttatttgat gtaaaacaag acttatgttg tccctaatgg aaagaccaag taagagagtt
                                                                         240
atgtgcgtct tcatggaagg gataactgga ttctttgcca gaaccgggtt gggaatttag
                                                                         300
                                                                          323
tttgttcaat gtggcatctt tca
        Homo sapiens
       misc feature
n=a,t,g or c
<400> 1191
taatttcaca cttgtaggct ttatttcctc atctgtaaaa tgagaaagta tgatcaggcg
                                                                           60
                                                                          120
gcttctaagt cttccagcca aaaaggaagg taattttaaa tcttgcacca ctgaggctgt
gtgtcgccgt ggaaactcca cagccaggct gcccaaagcc aaaggagcca ctactgcagt
                                                                          180
tggtggctca gaatcctctg ctgccacctc tgctcctcaa gtggatgctc caaatccaga
                                                                          240
agtggatttc atgcttccca tgttgaaaac ctaattcatt cataacctga gtaactggga
                                                                          300
                                                                          360
aagaataatt cttcagaatg gggcaatttg taaacttcaa aaaactgcag aactctactt
                                                                          420
gcttatgttg tcctaaatgt ctaccataaa ttttaaatct ctaaaaaatt atagcaaggg
                                                                          480
ttcacttcaa agtcttcatt gctgacataa cgtggctata ggtcctgctg ctctgggtgc
cctttccata tcacagaagc actagccgga aaaagctctg ggtttcantg attttactgg
                                                                          540
```

atagagcaac tgtagtcatc aacccaagag taattgggat catctgg	587
<210> 1192 <211> 417 <212> DNA <213> Homo sapiens	
<pre>&lt;400&gt; 1192 ttttttgcaa aagacaaaag aaaatatatt aaaatgttaa ttaatagcag ttttacagag gtgacaggat ttgggggtgt tgtttttttc tgttcttctt ccttgactga ggcaatacat tttgtgttac ttgtataata aaaaagtaga tttacatacc agaatggttg attggcttca aaccaaacag tccaataact gacgcattaa atctttattg actaaacagc ttaaaaaaatt</pre>	60 120 180 240
actactattt cettttattt gttgttgtga attttactca gaattaaaga taaatgatta	300
gtaattacag gaaaactaac ttgtaaaaat cttaaagaca ttgaatgggt taatgtactg agcagctacg gaatgcaagg cactgtagga gtagggtgag tatactcccc acaaggg	360 417
<pre> &lt;210&gt; 1193 &lt;211&gt; 448 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 1193 gagacggagt ttcgctcttg ttgccaaggc tggagtgcaa tggcacgntc ccagctcacc	60
acaacctcca cctcccaggg tcaagcaatt ctcctgcctc accctcccga gtagctggga ttacaggcat gcgccaccac gcccggccaa ttttgtattt tcagtagaga cggggtttct	120 180
ccatgttggt caagetggte tecaacteee aaceccagge gatecacetg ceteggeete	240
ccaaagtgct gggattacag gcgcgtgcca ccacgcccag ccttgggtgt ttttctttca	300
gctcctccag tactttcata ctattctaat aaatatattt tgttggtatg aagctatgaa	360
gcaaaagtag ctattaccaa tgcatacata cagtacactg gttttaagtt ccacctcaaa	420
gtgaatetta gageetgggt gtaagtge	448
<210> 1194 <211> 327 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<400> 1194 tttttgacta taaaattgca agtctttttt tttttttaat aaaaccaaca taacagaatg	60
tagaaatcta aacgaacatt tctccctcaa agtagttaca tccttagctc caacaaaact	120
actattgttg gagacttatt tagaactcct gtttgaggaa aggccttaaa aggtggttta	180
tgagccacat tagaaaatac ccttctaaac tttgggctgt ttaaaaacag aaaatccata ctcagaggat gacaccgaga aaattaaaaa ggtgctgcag ctctcacgga ggttcccnaa	240 300
agacetetag caagttetga geaacag	327
<210> 1195 <211> 446 <212> DNA <213> Homo sapiens	50
àtcaatgtca gggtccgtgg tgtgtttctt ggggcgggca tggtctccct gctcttcaga gtctgtgtca gagcactcag agcttccaat atcttctgaa tcagaacaag tcctttcctc	60 120
cacttgattt totaggagtg cagggacett etgaacteet gacaaatett tetteaatee	180
tgtaacagtc tggtatagaa tattatcttg ttgggcattc atggccatgt cctcttcctt	240
caatttcata attatgtcca tatccctctc ataatttttc acttcattca aggttctagg	300
aatatatgct cgcttaaaca cctcttcatc cacatgatct tggctagacc gttcttcctt	360
ggtcctttga gatgctattt ccatggcctt tgagagataa gcatccatgt tctcatggtg	420

taatgggatg ggatctgtga caaatt	446
<210> 1196	
<211> 296 <212> DNA	
<213> Homo sapiens	
<400> 1196 gtgtttaaaa ttatttttat tacttttaga ctttttctca aaataattat tcaaggaaat	60
atttcttaag tggcccagta aaactgtaga gccaatagtc agttacacca tattcaagga	120
caaggatagt cagctataga taggaactgt ctaaaccacg agaactgatc tctgatactg	180
aagtacccag aagtggctat attatcactg acttgaaaca gatcttagtc acccatgtag	240
catttaattc aatgtttggt tctttgcctc atttctttct taggtcacaa tctata	296
010 1108	
<210> 1197 <211> 397	
<212> DNA <213> Homo sapiens	
<400> 1197 aaggttgaaa ttaggaattt cttttttatt ggccactaaa gtcctagcaa gtttctgaca	60
gaagcacaga cagaaaatgg aaacaaatac cttactggga atgtttcctt gcttgcacta	120
accttgacta cagcaataac gcattgctta acagtcaaag tgcaccaggt catttccgca	180
aatggcaggg tgagtgactg tgccgttccc aaggaagcaa aacagacaca aacaggtccc	240
acgcgctggg tgtcctggct gagtacagag gaggctgcta gaccggcagt acccttttcc	300
caagtgagga aagccagctg tgacactctg cttgccggca ggggttcccc accctcccct	360
ccaccatctg gcccatagct gtaccaccaa ttacatt	397
coaccatoly geocaraged generational contract	
<210> 1198 <211> 621 <212> DNA	
<2125 ĎÑĀ <213> Homo sapiens	
-	
<220> <221> misc feature <223> n=a,t,g or c	
1225 22-47-07-3	
<400> 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt	60
<400> 1198	60 120
<400> 1198 cettetgttg agatggagte teactetgte acceaggetg gagtgeagtg tegegacett ggeteactge aacetecace teccaggtte aagcaattet ecceacetea geetecaaag tagetgggat tacaggeatg egeaaceatg eccagetaat ttttgtaatt ttagtagaga	
<400> 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag	120
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc</pre>	120 180 240 300
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt</pre>	120 180 240 300 360
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct</pre>	120 180 240 300 360 420
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg</pre>	120 180 240 300 360 420 480
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccaacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca ttctgctctg tcttcccaa tgcctcagtt</pre>	120 180 240 300 360 420 480 540
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcctctcgt tcttcccaa tgcctcagtt tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang</pre>	120 180 240 300 360 420 480 540 600
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccaacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca ttctgctctg tcttcccaa tgcctcagtt</pre>	120 180 240 300 360 420 480 540
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctgga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcctctgga ccctctgcag atacagcctg tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre>	120 180 240 300 360 420 480 540 600
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcctctgga ccctctgcag atacagcctg tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre> <210> 1199 <211> 440	120 180 240 300 360 420 480 540 600
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccaccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcctctgga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcttgctctg tcttcccaa tgcctcagtt tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre> <210> 1199 <211> 440 <212> DNA <211> Homo sapiens	120 180 240 300 360 420 480 540 600
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca ttctggga ccctctgcag atacagcctg tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatctc cncttgggga g  &lt;210&gt; 1199 &lt;211&gt; 440 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1199 tttctaaaa aaatttttt aatcagttta aaagttcgag gaaaaagaaa atcaatcaga</pre>	120 180 240 300 360 420 480 540 600 621
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgcacctgg gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca ttctgctcg tcttcccaaa tgcctcagtt tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttggga g</pre> <210> 1199 <211> 440 <212> DNA <213> Homo sapiens <400> 1199 ttttctaaaa aaatttttt aatcagttta aaagttcgag gaaaaagaaa atcaatcaga aaagcaacta taccaaaaca gggttatcca agtgagcttc tctcacttcc ttaggtgac agggacacta tctcactcc ttaggtagac tctcacttcc ttaggtagac tctcacttcc ttaggagac tctctagacaccacccctccacccct tctctagta aggggctcca tggggcaang atcccttang atcacttang tcttctaaaa aaatttttt aatcagtta aaagttcgag gaaaaagaaa atcaatcaga tccttcactcc ttaggagac tctctcacttcc ttaggagac tctctcacttcc ttaggagac tcccacaccctccacccct tctcacttcc ttaggagac tcccacacacccct tcctcacacacccct tcctcacacaccct tcctcacacacccct tcctcacacaca	120 180 240 300 360 420 480 540 600 621
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccaggctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctacat gcatgtcgtt ccccaccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca ttctgctctg tcttcccaaa tgcctcagtt tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre> <pre>&lt;210&gt; 1199 &lt;2211&gt; 440 &lt;2213&gt; DNA &lt;2213&gt; DNA &lt;2213&gt; Homo sapiens</pre> <pre>&lt;400&gt; 1199 ttttctaaaa aaatttttt aatcagttta aaagttcgag gaaaaagaaa atcaatcaga taagcacta taccaaaaca gggttatcca agtgagctc tctcacttc ttagatggac ttcagcttat aggatgacac gagatgcgag taagaagcta tttgcgcatt tcagctggt</pre>	120 180 240 300 360 420 480 540 600 621
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gggctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagctg tgctggaccc ccagccaggg tgaaggctca ttctgctctg tcttcccaa tgcctcagtt tccccaaaag ctgntcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre> <210> 1199 <211> 440 <212> DNA <213> Homo sapiens <400> 1199 ttttctaaaa aaatttttt aatcagttta aaagttcgag gaaaaagaaa atcaatcaga aaagcaacta taccaaaaca gggttatcca agtgagcttc tctcacttc ttagatggac ttcagcttat aggatgacac gagatgcgag taagaagcta tttgcgcatt tcagctggt gacttgtgtc tgcgttgctt tccttcttt cttcttt ctctgtgga ctgagaatgc tagtgcctt	120 180 240 300 360 420 480 540 600 621
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atgggggttt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt tccattct cttccaaag ccatggccat gcgctcctgt gtacaggtgc ataaacacat cagtgtgca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagcctg tgctggaccc ccagccaggg tgaaggctca tcctctggga ccctctgcag atacagctg tccccaaaag ctgnttcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g  &lt;210&gt; 1199 &lt;211&gt; 440 &lt;212&gt; DNA &lt;212&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1199 ttttctaaaa aaatttttt aatcagtta aaagttcgag gaaaaagaaa atcaatcaga taagcaacta taccaaaaca gggttatcca agtgagctt tctcacttcc ttagatggac tcagcttat aggatgacac gagatgcgag taagaagcta tttggcatt tcagctggt gacttgtgc tgcgttgctt tccttcttt cttctgtgga ctgagaatgc tagtgcctt gaatttgtct ttacaggacc tgagggtctt tttgatggtaa gagaatgaat gatcattgct</pre>	120 180 240 300 360 420 480 540 600 621
<pre>&lt;400&gt; 1198 ccttctgttg agatggagtc tcactctgtc acccaggctg gagtgcagtg tcgcgacctt ggctcactgc aacctccacc tcccaggttc aagcaattct ccccacctca gcctccaaag tagctgggat tacaggcatg cgcaaccatg cccagctaat ttttgtaatt ttagtagaga tgggttttcg cttagtagag atggggtgtt tgccaggctg gtcccgaact cctgacctca ggtgatccgc ccacctcggc ctcccaaagt gctggggtta caggcttaag ccaccaagcc cggccgacct tcttctattt ttccattctc ctttccaaag ccatggccat gggctcctgt gtacaggtgc ataaacacat cagtgtgcca tccctcacat gcatgtcgtt ccccacccct ccttcccagg gcttctcttg gctccagcgt tcctctggga ccctctgcag atacagctg tgctggaccc ccagccaggg tgaaggctca ttctgctctg tcttcccaa tgcctcagtt tccccaaaag ctgntcagt ccttctagta aggggctcca tggggcaang atcccttang attaatcttc cncttgggga g</pre> <210> 1199 <211> 440 <212> DNA <213> Homo sapiens <400> 1199 ttttctaaaa aaatttttt aatcagttta aaagttcgag gaaaaagaaa atcaatcaga aaagcaacta taccaaaaca gggttatcca agtgagcttc tctcacttc ttagatggac ttcagcttat aggatgacac gagatgcgag taagaagcta tttgcgcatt tcagctggt gacttgtgtc tgcgttgctt tccttcttt cttcttt ctctgtgga ctgagaatgc tagtgcctt	120 180 240 300 360 420 480 540 600 621

Sill   1200   1201	ccgaccttca cagtgctagt	440
decaatcgff tracttcat tegrtatcte agettatgtt tgaagataaa teettaettt tagettttge caetttgttg caatageaca tintiteggt traceagatt teaggeataa 120 teeteatet aaageacata caetagataa aaggaaggac aaaacattea gtgacteee 180 teegenaeee coateceaa eeeeaacaet acetacaata aatetagtae ateaagtag 240 ettitititit titeetgaaa aaaggaaaaa aagaetttae attgeateat acaagagaaa 300 teetaaataa gteeceage e 360 eetaataaaa gteeceage e 381 eetaataaa gteeceage e 381 eetaataaa gteeceage e 381 eetaataaaa gteeceage e 381 eetaataaaa gteeceage e 381 eetaataa gteegaaaaa gagagaaaa tagtggggaa eagagggeeeg gateggeee teatteetee tegtetteet etteetaeta ategteetee 1820 ettettuttgaa gaagagaaatee teatteetee tegtetteet etteetteate ategteetee 183 egggggggaaga teggageeg teggtegggaagg gaagaggggeeg etegggggagggggggggg	<212> DNA	
gccaatcgtt ttgcttctat tcgttatctc agcttatgt tgaagataaa tcctacttt ttagettttgc cacttgttg caatagcaca ttntttcggt ttgccagata tcaggcataa 120 ttctcattct aaagcactat cattagtata aaggaaggac aaaacattca gtgactcccc 180 tccgcnaccc ccatcccaa ccccaacat acctacacta aatctagtac atcaagttag 240 ctttttttt tttcctgaaa aaaggcaaaa aagactttac attgcatcat acagcagata 360 cctaataaaa gttccccagt c 381 <pre> </pre> <pre> <pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> </pre> <pre> &lt;</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>	<220> <221> misc feature <223> n=a,t,g or c	
tagettttge eactttgttg caatageaca thithtegst tigecagatt teaggeataa 120 ticteatic aaageactat cattagitat aaggaaggac aaaacattea gigacteece 120 teegenaece ceatececaa ceccaacact accacacta aatetagitaa 240 cittititit titteetgaaa aaaggeaagaa aaagactitaa ateaagtag 240 cittitititit titteetgaaa aaaggeaagaa aagactitaa ategataata 240 cectaaataa gicaaactat cagaggaaac tgitggegta cagetitaca aacaatitac 260 cectaataaaa giteeceagt c 381 cectaataaaa giteeceaga cagaggaaac tgitggegta cagetitaca aacaatitac 260 cectaataaaa giteeceaga cectaacacta aagaggagaa cagetitaca aacaatitac 260 cectaataaaa giteeceaga cectaateeceaga cagetitaca aacaatitac 281 cectaataa cagaagagaa cagaggeeceagagagagagagagagagagagagagagag	<400> 1200 gccaatcgtt ttgcttctat tcgttatctc agcttatgtt tgaagataaa tccttacttt	60
ttetcattet aaagcactat cattagtata aaggaaggac aaaacattea gtgactcocc tegenacce ccatececaa coccaacact acctacacta aatctagtaca atcaagttag 240 cttttttttt ttetcetgaaa aaaggcaaaaa aagactttac attgacacat accaagtagata 360 cctaaataca gtccaacat cagaggaaac tgttggcgta cagctttaca aacaacttac 360 cctaataaaa gttccccagt c	<del>-</del>	120
tecgenacce ceatececaa ceccaacact acetacacta aatetagtac ateaagttag cettttttttt tttectgaaa aaaggeaaaa aagactttac attgeateat acaggagaaa 300 tectaaatea gteaaactat cagaggaaac tgttggegta cagetttaca aacaatttac 360 cetaataaaa gtteeceagt c 381 cetaataaaa gtaaaaccag tgagteetet aaaagaegett teegactgt ceggtgeaga 381 cetaateaga gagggeeeg gtaaaaaccag tgagteetet aaagaegett teegactgt ceggtgeaga 382 gaggggeege gagaggeege aaagttggee eteatteete tegtetteet etettetaate ategteetee 120 geggggggagag teggacette gteettatge tetttettee aetteatgeg geggttetgg 240 aacacagatet taatetggeg eteggtagag acagagegeg teggegatte caatgeggeg geengtacaa gggtaaggeg teggagaagg eteggagatte caatgeggeg geengtacaa gggtaaggeg ttgagaggag acteettee acetetaage geggetteeg acaateceagg gtaaaatecagg gtaaaategg gnaaaattgg ettaaaanggg ggeaatnaag g 420 aaaatecaggg gtaaaatgg gnaaaattgg ettaaaanggg ggeaatnaag g 471 cetagaaaatecate teggtggaat teagagttee tettgagtgg attteaaa tettaaacaaa agtetteet 120 tagaaaatect ttgtgtggac tetgggtte attttacaaa tettaaacaaa agtetteet 120 tagaaaaatec ttgtgtggaa cettegtea gaaatecaa cectgtgtgg aateteet 120 tagaaaatec ttgtgtggaa cettegtea gaaatecaa cectgtgtgg aateteet 120 tagaaaatec ttgtgtggaa geettegaga acettegtea gaaatecaa cectgtgtgg aateteett 120 tagaaaatec ttgtgtggaa geettegaga acettegtea gaaatecaac cectgtgtgg aateteett 120 tagaaaatec teettaagg acettegtea gaaaceaaaaa agtetteet 120 tagaaaatec teettaagga geecacegaa teegaaagga gtteeaateet 120 teettaaeet teetgggaa teettegaa gggaaggeeg geetgagaa acetteete 120 tagaagaaga gtteetteete 120 tagaagaaga geecaataaga geecaaaaaaa agtetteete 120 tagaagaaga geecaaaaaaaa agtetteete 120 tagaagaaga geecaaaaaaaaaaaaaaaaaaaaaaaaaa		180
cttttttttt tttcctgaaa aaaggcaaaa aaggctttac attgcatcat acagcagata 300 tcctaaatca gtcaaactat cagaggaaac tgttggcgta cagctttaca acagcagata 360 cctaaatcaa gtccccagt c 381 <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>		240
tcctaaataa gtcaaactat cagaggaaac tgttggcgta cagctttaca aacaatttac cctaataaaa gtccccagt c  210		300
cctaataaaa gttccccagt c  210		360
<pre> &lt;211&gt; ATI</pre>		381
<pre> &lt;221&gt; misc_feature</pre>	<211> 471	
gagggcccg gateggccc teattecte tegtetteet ettetteate ategtectee tegteggcet tyteeggge anagttygg geggcagagg geacggcgc cteggaget 180 geggcggag teggacete gteettege tettetteet ettetteate ategtectee 120 accagatet taatetygeg cteggtgagg geggcagaggg geacgggcge cteggagget 240 aaccagatet taatetygeg cteggtgagg cagagegceg tyggegatt caatgeggeg 300 geengtacaa gggtaagegg ttgaagtga acteettee cagetteeaa egtnettygg 360 tancecegtg taaggttttg gegggccceg gttteetygt caaaggteee tnaagaacgg 420 aaatecaggg gtaaaatgeg gnaaaattgg cttaaanggg ggcaatnaag g 471  <210 > 1202	<220> <221> misc feature <223> n=a,t,g or c	
gagggccccg gatcggcccc tcattcctcc tcgtcttcct cttcttcatc atcgtcctcc tcgtcggcct tgtccggcc anagttggcg gcggcagagg gcacggcgcc ctcgggagct 180 gcggcggcag tcggaccttc gtccttatgc tcttcttcc acttcatgcg gcggttctgg 240 aaccagatct taatctggcg ctcggtagg cagagcgccg tgggcgattt caatgcggcg 300 gccngtacaa gggtaagcgg ttgaagtgga actccttctc cagcttccaa cgtncttggg 360 tanccccgtg taaggtttg gcgggccccg gtttcctggt caaaggtccc tnaagaacgg 420 aaatccaggg gtaaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g 471    <210 > 1202	<400> 1201 tttttgtaa gtaaaaccag tgagtctctt aaagacgctt ttccgactgt ccggtgcaga	60
tcgtcggcct tgtccgggc anagttggcg gcggcagagg gcacggcgcc ctcgggagct gcggcggcag tcggacctc gtccttatgc tcttcttcc acttcatgcg gcggttctgg 240 aaccagatct taatctggcg ctcggtgagg cagagcgccg tgggcgatt caatgcggcg 300 gccngtacaa gggtaagcgg ttgaagtgga actccttctc cagcttccaa cgtncttggg 360 tanccccgtg taaggtttg gcgggccccg gtttcctggt caaaggtccc tnaagaacgg 420 aaatccaggg gtaaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g 471		120
gcggcggcag tcggaccttc gtccttatge tctttcttce acttcatgcg gcggttctgg accagatct taatctggcg ctcggtgagg cagagcgcg tgggcgattt caatgcggcg 300 gccngtacaa gggtaagcgg ttgaagtgga actccttctc cagcttccaa cgtncttggg 360 tanccccgtg taaggttttg gcgggccccg gtttcctggt caaaggtccc tnaagaacgg 420 aaatccaggg gtaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g 471 <pre> &lt;210&gt; 1202 &lt;211&gt; 447 &lt;211&gt; DNA &lt;211&gt; HOMO sapiens </pre> <pre> &lt;400&gt; 1202 tatggtagta acagttcat tcagttttge attttacaaa tttaaacaaa agtcttctt cttttttttt ctttacttgc atgtttgct tttgagtgtg ttttcaattt gtgcattcct ttgagaaaatct ttgtgtggac tttgagagtt ctccctgaaa tgtgccaggc gcctgagtca gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctcctt ctcctggaga tgcaaccagaa ttcgaatgtg acttggtgt tctgcgtgg aatctccttc ctcctctctct ctccggagat gccacccgaa ttcgaatgtg acttggtgt tctgcgtgga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgtttgaac gaggacgcg ggtggggaccg ggtcctttgg ccagtcagga accagca </pre> <pre> &lt;210&gt; 1203 &lt;211&gt; 472 &lt;211&gt; MA </pre> <pre> &lt;2210&gt; 472 &lt;2211&gt; MA </pre> <pre> <pre> </pre> <pre> <pre> </pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre>  </pre> <pre> <p< td=""><td></td><td>180</td></p<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>		180
gccngtacaa gggtaagcgg ttgaagtgga actcettete cagettecaa cgtnettggg 360 tancecegtg taaggttttg gegggeeceg gttteetggt caaaggteec tnaagaacgg 420 aaatecaggg gtaaaatgeg gnaaaattgg cttaaanggg ggcaatnaag g 471   <210 > 1202		240
tanccccgtg taaggttttg gegggcccg gtttcctggt caaaggtccc tnaagaacgg aaatccaggg gtaaaatgg gnaaaattgg cttaaanggg ggcaatnaag g 471  <210 > 1202		300
aaatccaggg gtaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g 471  <210> 1202 <211> 447 <212> DNA <212> DNA <213> Homo sapiens  <400> 1202 tatggtagta acagttcat tcagttttgc attttacaaa tttaaacaaa agtcttctt ttttttttt ctttacttgc atgtttgtct tttgagtgtg ttttcaattt gtgcattcct tagaaaatct ttgtgtggac tttggagtt ctccctgaaa tgtgccaggc gcctgagtca gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc ctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgtgt tctgctgaga ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg ggtcctttgg ccagtcagga accagca <pre></pre>	gccngtacaa gggtaagcgg ttgaagtgga actccttctc cagcttccaa cgtncttggg	360
<pre> &lt;210 &gt; 1202 &lt;211 &gt; 447 &lt;212 &gt; DNA </pre> <pre> &lt;100 &gt; 1202 tatggtagta acagtttcat tcagttttgc attttacaaa tttaaacaaa agtctttctt ctttttttt ctttacttgc atgtttgtct tttgagtgtg ttttcaattt gtgcattcct 120 tagaaaatct ttgtgtggac tttggagttt ctccctgaaa tgtgccaggc gcctgagtca 180 gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc 240 ctctctctct ctccggagat gccacccgaa ttcgaatgtg acctgtgtgt tctgctgaga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgtttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca </pre> <pre> &lt;210 &gt; 1203 &lt;211 &gt; 1203 &lt;221 &gt; DNA &lt;213 &gt; Homo sapiens </pre> <pre> &lt;220 &gt; misc feature &lt;221 &gt; misc feature &lt;221 &gt; misc feature &lt;222 &gt; n=a,t,g or c</pre> <pre> &lt;400 &gt; 1203 tttttcagg accagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60</pre>	tanccccgtg taaggttttg gcgggccccg gtttcctggt caaaggtccc tnaagaacgg	420
<pre>&lt;211&gt; 47/ &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1202 tatggtagta acagttcat tcagttttgc attttacaaa tttaaacaaa agtcttctt 60 ttttttttt ctttacttgc atgtttgtct tttgagtgtg ttttcaattt gtgcattcct 120 tagaaaatct ttgtgtggac ttttgagttt ctccctgaaa tgtgccaggc gcctgagtca 180 gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc 240 ctctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgtgt tctgctgaga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca </pre> <pre> &lt;210&gt; 1203 &lt;221&gt; Momo sapiens </pre> <pre> &lt;220&gt; misc feature &lt;221&gt; ma,t,g or c </pre> <pre> &lt;400&gt; 1203 ttttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60</pre>	aaatccaggg gtaaaatgcg gnaaaattgg cttaaanggg ggcaatnaag g	471
tatiggtagta acagtttcat tcagttttgc attttacaaa tttaaacaaa agtctttctt  ttttttttt ctttacttgc atgtttgtct tttgagtgtg ttttcaattt gtgcattcct  tagaaaatct ttgtgtggac tttggagttt ctccctgaaa tgtgccaggc gcctgagtca  gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc  ctctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgtt tctgctgaga  ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca  gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg  ggtcctttgg ccagtcagga accagca  420  ggtcctttgg ccagtcagga accagca  447   <210 > 1203  <211 > 472  <212 > DNA  <213 > Homo sapiens  <220 >  <221 > misc feature  <220 >  <221 > ma,t,g or c  <400 > 1203  tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60	<211> 447 <212> DNA	
ttttttttt ctttacttgc atgtttgtct tttgagtgtg ttttcaattt gtgcattcct tagaaaatct ttgtgtggac tttggagttt ctccctgaaa tgtgccaggc gcctgagtca gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc ctctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgtgtt tctgctgaga ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg ggtcctttgg ccagtcagga accagca  <210 > 1203 <211 > 472 <212 > DNA <211 > 472 <213 > Homo sapiens <220 > <221 > m=a,t,g or c <400 > 1203 tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60	<400> 1202 tatggtagta acagtttcat tcagttttgc attttacaaa tttaaacaaa agtctttctt	60
tagaaaatct ttgtgtggac ttttggagttt ctccctgaaa tgtgccaggc gcctgagtca 180 gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc 240 ctctctctc ctccggagat gccacccgaa ttcgaatgtg actgtgtgt tctgctgaga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca 447  <210> 1203 <211> 472 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 1203 tttttcagg accagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60		120
gacacaaaca ctcccttagg accttcgtca gaaactccac ccctgtgtgg aatctccttc ctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgttt tctgctgaga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca 447  <210> 1203 <211> 472 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c <400> 1203 tttttcagg accagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60		180
ctctctctct ctccggagat gccacccgaa ttcgaatgtg actgtgtgtt tctgctgaga 300 ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgtttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca 447     <210> 1203		240
ggtccattgt catccccaga tgaaagaaga gaccaaagca gttaccactg atggaagcca 360 gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg 420 ggtcctttgg ccagtcagga accagca 447   <210 > 1203		300
ggtcctttgg ccagtcagga accagca  <210> 1203 <211> 472 <212> DNA <213> Homo sapiens <220> <221> misc feature <221> c223> n=a,t,g or c  <400> 1203 tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60		360
<pre> &lt;210&gt; 1203 &lt;211&gt; 472 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;221&gt; c223&gt; n=a,t,g or c </pre> <pre> &lt;400&gt; 1203 tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60</pre>	gtgaagatgg ttgggggaac tccttaacct ttcctgggaa tgttttgaac gaggacgccg	420
<pre>&lt;211&gt; 472 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c </pre> <pre>&lt;400&gt; 1203 tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60</pre>	ggtcctttgg ccagtcagga accagca	447
<pre>&lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 1203 tttttcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60</pre>	<211> 472	
titittcagg acacagtgca ctttaatgac atacagcatt taaaatcctt cagacaaagg 60	<221> misc feature	
	<400> 1203	60
- Section with the section of the se	tetgaaaaca gtetttaat geaageetaa atetteaage acataaaate tttetttt	

<400>

```
aagcttaatt tcaacatcac tggaagaaat acctatcgtt aaaccctgat nngcattctt
                                                                          180
                                                                          240
aaccacttgc agccagtgtt catgaggcaa aacgtgaccc agagactttg ttcaagttct
cctcctaggg cgtctacatt cacggcggtc actccgtttc tgtctccttt tgtttggcac
                                                                          300
                                                                          360
ctgctggtgt gaggatcagg gcttgcagaa tgtccgacag ggaaataata cccacaatac
tatctgcttc atttaccacc accaagccga tggaccctca gctcttacta ttctggtcca
                                                                          420
                                                                          472
ggatggtctc caggaatttc cagcttattg gcacttnaaa aaacntttca aa
       1204
334
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1204 acattattta cqtttagttt attgcagaga tgaagacagc atactagaag ttggcttcta
                                                                           60
tttcacaccg ttcacagcac tcactctgtt ctccatttca tccactcacc catgcaaaag
                                                                          120
gtctgtacac gcaatgatgt ctgatgtttc ttggtttcca tagtgtaaca ggaaacttga
                                                                          180
catttcaatt aaaaaggtaa aatgaagaca tttaccatca gactataaaa ctcctcttct
                                                                          240
gtaagagaat actatagtac ttgaagatat gatttgaaaa aaaatcatgt accaaatgan
                                                                          300
                                                                          334
aggggcacca tttcaagagc actaggacta catt
       1205
531
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
cgctccaaac gggtcttggc tttaatgtgg ttttcttcaa acccaaatgg ctgaacattg
                                                                           60
ctatgaacat aggtcatgta tattgagaca ctgattccgt tttatggagc cctgtggctc
                                                                          120
atgacaggtt aacgagaggg cacgaaactc cagtgcgacg tgctccattt tgaaagcaga
                                                                          180
taaagctccc ctcatcagag tgaagaggaa agtagccctg ctggaataag gggagagcgt
                                                                          240
                                                                          300
accqcttqaa qacaqqqtqc tcagatgttt tcattccaag caagacagtg ataacagcac
agcactgctc ccatccctgg cccctttcct ttctcactta ctagggcttt ttgcttcatg
                                                                          360
caaactctgt ggctggactt tgagggatcc agaatttagg atatagggcg ggtccttcac
                                                                          420
gagggaagtg accgtggctc agccaaaaat cacaagatct cctcaagatt ccagaatgta
                                                                          480
                                                                          531
ttccaaagct gttgtacccc ttntccctcc accggctccc ctttgcaagc t
<210><211><211><212>
       1206
381
DNA
Homo sapiens
<400> 1206 ctgaattaaa gagatgaatt tattggtaaa tagataaaat taacacctat tttaatatat
                                                                           60
                                                                          120
ccaaacccct tccttatata tattaggtaa attaaaagaa aaaaattatc aaagcaatac
tacagccagc tagatcgcca atttacaaat gagttaagta agtaccataa gtttgtttga
                                                                          180
atatcaggtg cttcagagtt tttctcaaac agttacaaaa gagattaggt tcccaatcag
                                                                          240
ttcacaaaaq ctaatttaga gaatgtagct taactacagt actgaggttg tcacacactt
                                                                          300
aactttcggt ctcttgctta tttattcata tctgaggttc actgtttcta ctaggataca
                                                                          360
                                                                          381
ttccgcccac acccacacct c
        1207
354
        354
DNA
Homo sapiens
```

tgctggggcc acgtgggcat cctctttatt ggtgcttcca aggtgctggt gcagagccct	60
tggctgaagg gcctggactg tgggggaggg tggcagcccc agagacagca ggggagagga	120
agcgttctgg cataaaaaaa gagttcctgg gtaaggctcc tgtttccgag cattcgggca	180
gcaaggggag tggcgcacac ttctcagccg aagacactct tggtgggtcc ggctttgggc	240
ttctcaaaga cagtctcggt acctgtgcgg gtgcggctga acaccgacgg ggcggccgag	300
	354
cagettgete acaetetege atgaeetggt aggtettgga ettgatttee tggt	331
<210> 1208 <211> 346	
<211> 346 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 1208 ctggatcttg ctctagtgtg agcactcctg aacttcacat attctccttg tcccaaatgc	60
	120
aagggtttac teteaagaga etetaggete aetgeecata aacetttgag ttggaccaaa	180
tettaacate cetgtggatt tgeteatact geeetgggea gaactettte ettetttgga	
agtotgaatt acttoatatt tgacatotat tttgaaatto tgttttacag ggtttaggat	240
gggggtaggt aggcacagga aagagagtag agcattctct cttttctagc aatttccatt	300
atcatgcccc ttctagcttt tagaccagca gttctgagac agggat	346
<210> 1209 <211> 403	
<212> DNA <213> Homo sapiens	
<400> 1209	
attaatgcaa acatattttt attaaagaat gaatgcattt atgctaaaga atagcttaca	60
tatgttgtaa agcaacaagc atatcttcaa gaagtgagtc ctcctcaata tgactccatg	120
cttattctac atgcctgaaa actgggccca cacacagggg cacacgtaca cgcacacaaa	180
cgcagatacg gacacacaga tatgcagacc gaaatgctga caccatcgct ctctagattg	240
gattagctct catttaaggc ttcttaggtg ccgcagtgcc cctaatatta ccaggattga	300
aaacagactt ttaggaagga gcagcattac ttcgaaaagt agtcatctgc tcttgtcctc	360
caatgtgtgt attttaacaa ataccattta attctatgtt gac	403
caacycycyc accecaacaa acaccacca accecaages gas	
<210> 1210 <211> 296	
<212> DNA .	
<del>-</del>	
<400> 1210 gttttataaa cctttattgg aaaggctaca aactttatat tgccaccaca tttcttatgt	60
ttaaagtggt tgtggggaag taaccttgga tacaaaacta ctatgctgtt gaatcttacc	120
caggettgtt gtaaaatatt ttttgtacaa tggaggtaga gtggataggt caataattta	180
aacctcacag gacttgatta gtgtcagcac accttttttc attcaggttt tcaggttcta	240
	296
gcagacctta gaataaactg tggaatttgt ttgcaagagt tactggtggg gacact	250
<210> 1211	
<210> 1211 <211> 348 <212> DNA <213> Homo sapiens	
<213> Homo sapiens	
<400> 1211 ttttttaggt tttcaaagat tttattaaaa aaaccaaaga tatataacac taggacggga	60
ccagcggact tgggggcagc tcccagtctg ctgatcagta ccctctgtcc cagggctcca	120
cctggatggt cctgaggccc aaaccctgcc tctcagctgc ctcctgccct acaaactggt	180
	240
gactgctctc atccagcttc tgatctgttt catttaagat gattaaaata ctcccctccc	
caattcgctt aaaaataatt ttcaaagatt aaaaatttca tttgtgtgtg tgtgttttt	300
taaataagaa ctttaaatgt gggatatctc cttcttcccc taggtcca	348
<210> 1212	
<210> 1212 <211> 504 <212> DNA	
<213> Homo sapiens	
<400> 1212	

tttttttttc gctacaaatc aaaaggcttt attccttata taaacccaca cttagaaaaa	60
ataaatagtt aataaattat aggcaaacca gttggtctca gccacgcctc ccactgaggt	120
ccagggcagc cgctgcagca gcagacgagc gggaaggtgt ggccacagct tggctcaagg	180
gcgtggtctg gactggggac gaagggacag aggaggaagg caaggtctgg gtgagggcag	240
ggatgggggc taaaggtggg ttcctgaggc gtgcccaggc tctggcccgg gcagcagggg	300
tgaggcaggg gctcagctcc tcctgggcct gggtgatgcg gcgtgcgaac ggctgcgatc	360
ccgagcaagc tgctcccagg ggccctggcg ggcggcctgg ggcgcctctg cccagacagc	420
caggaaatgg acagtgacct tctcggagaa gcgcaccttt ctggccttta ggggagtctc	480
agggtccgga tcatgagtag gggt	504
<210> 1213 <211> 338	
<212> DNA	
<213> Homo sapiens	
<400> 1213 tgacttctta ttgaatattt tactgtgtta acgctcatta tttatacaga cattaggttt	60
acagaatatt ctgttttaca tcaccaaaat tcacagtccg agaataacaa cataaccagg	120
tcccaattcc tccatgcacc ccacaagctt ctgtccaccc tattttctgg acagaaatta	180
gcacaaccca caggtttttc ctgggccaag tcttcctttg ctgccactgt cttggcttct	240
aatcaagctc tgacaggcca acattgtgaa gtcctcaccc tttcccattc acttctggtc	300
tectagteta getaateece etececeaga aggttaag	338
coctageeta getaateete eteeteetaga aggetaag	
<210> 1214	
<211> 458 <212> DNA	
<213> Homo sapiens	
<400> 1214 gcgaccgccg tcagacatcc acgacagcga tggcagttcc agcagcagcc accagagcct	60
caagagcaca gccaaatggg cggcatccct ggagaatctg ctggaagacc cagaaggcgt	120
gaaaagattt agggaatttt taaaaaagga attcagtgaa gaaaatgttt tgttttggct	180
agcatgtgaa gattttaaga aaatgcaaga taagacgcag atgcaggaaa aggcaaagga	240
gatctacatg acctttctgt ccagcaaggc ctcatcacag gtcaacgtgg aggggcagtc	300
teggeteaac gagaagatee tggaagaace geaceetetg atgtteeaga aacteeagga	360
ccagatettt aateteatga agtacgacag etacageege ttettaaagt etgaettett	420
tttaaaacac aagcgaaccg aggaagagga agaagatt	458
cccaaaacac aagcgaaccg aggaagagga agaagacc	
<210> 1215 <211> 486	
<212> DNA	
<del>-</del>	
<400> 1215 cctaaatgtt tcaatgccat aaagcttaca ttcccttgaa gcagagtaca ggaaacctta	60
gcaatatgct accatccagt aggatataaa tataaagaag ctgtatcagc aagggatgct	120
cagggaatgt gtttgcagcc cgtttcacgg tagccgcttg agaggggata ttggaagtga	180
gtgactttct ttcatttggc aaagtttcct tatctcagca cctactcttt ctgatggtat	240
gtttttgaag gctgcacagt acgactctgg gtaccgtgtg tacatacata tgtaaggaat	300
aacgtttatg ttgctcagaa taggcacttt ttgaaggcag taaatctaaa agtaaagtta	360
atagageeta tatttagtge teatettete aetttgetga tgtgtatget gaacagaaga	420
tcacagattt gagtcagtct cgcaaagagg ccggagtcgc aaatggctat attcagagct	480
ggggaa	486
<210> 1216 <211> 408	
<212> DNA .	
<213> Homo sapiens <400> 1216	
cagcaacaaa aacctgtatt taagcggcta attccagaga tgagtagtgg agagagcaaa	60
tgagcctggt tagagctcac tctgggagga gtatgtggac gacacttggc tgtctcttca	120

gggggccagg ctgggcccta	gcactcccgg	cagtggaaag	gcagagctgg	ctgccagctc	180
tggcctccgc ctgggattca					240
tgggtcctcc ctcaaggagc					300
acgcagactg ttgctgtagt					360
gatgtcgatg taaacctggt	tcagattgtc	gctgcaggag	accttgct		408
<210> 1217 <211> 249 <212> DNA <213> Homo sapiens					
<400> 1217 ttgagcagga gtgggctcaa	gttttatttg	gaatcattta	aaaaaaaaat	tcacagcagc	60
ataagtgggg tcagaaggac					120
gcagcagcac aggtggacag					180
gccgcatgtc actcaaggcg					240
ggagcgctc					249
<210> 1218 <211> 218 <212> DNA <213> Homo sapiens					
<400> 1218 ttaaaggttg agacacgtct	aaccagttta	atgacttcga	aaccgtgcaa	atgccaaact	60
atggagcact agggatacaa	gaggcaccaa	ggcctggggg	gtgggggtgg	gggacactac	120
aacattgtca tggggaaaac	gggatcacct	aatattggta	ggggaaaagg	gcggtccact	180
ggcagctcag aactatgaca	tattcctcag	gggagcct			218
<210> 1219 <211> 347 <212> DNA <213> Homo sapiens					
<400> 1219 tttttacaaa gaaagaacag	cggacgaagg	tggccatttt	attttctcaa	agccacacta	60
cctgctgcta cacaggacat					120
ttgagacagc catgtctcag	aggtgaagat	tggaggagat	tttaatatag	ggtgtgaatt	180
ccaattcaca tctcttccaa	cgggacctct	ttccgaagtc	ccgggaacta	acattcatca	240
acacctctga catcccagag	gatcgcaaca	ttcctgccaa	gggttattac	tcccatttcc	300
cagatgaaga gattgagtcc	ctgcagcacg	caattagaca	gtagcag		347
<210> 1220 <211> 396 <212> DNA <213> Homo sapiens					
<400> 1220 tttcagatca cgacaacagg	taacctttag	tcagaactca	ccacccactg	tgttaagcct	60
tacatgacaa tcaccatgaa	gatttacata	cacatgttat	atcatagtct	cctcacaaca	120
tgtctaagag gtaggcacgt	cattgttccc	attttgcaga	tgaggaaact	gaggttcaga	180
gagggcactt ggcttgccca					240
tgaccccagt aactgctctc					300
aaacctttgc caccacttcc			ggcagagaat	ggggataggt	360
gggggaatga ggtgagaggg	gagatgttta	gaggtg			396
<210> 1221 <211> 339 <212> DNA <213> Homo sapiens					
<400> 1221 ttttttagaa aagaagttgt	ttttatttta	attcaagagg	gttggaaaca	taaaaacagt	60
acattttcct tgcagaaaat					120
tacactgcat tttaggcaat	tttctaacat	taagtgacaa	gttatacttt	tgatttttt	180

tttcacattg gagctattat	gatttgcact	cataatacca	aagctactga	actcaccaat	240
ttttttctta gtaattaaaa					300
atcaaaagta actctttcag	accaaacatc	cagcaaaac			339
<210> 1222 <211> 368 <212> DNA <213> Homo sapiens					
<400> 1222 tttaaagttt ttttcagttt	attatttcat	gatccctagt	caaacactga	taccccaaaa	60
taggattttc cttccttcct					120
ttctggatgc tgctctacca					180
ggatgttgca gatgtgaaac					240
ggccctttct ggccgtagct					300
tatttctcaa agaccagaat					360
acagcaat					368
<210> 1223 <211> 337 <212> DNA <213> Homo sapiens					
<400> 1223 tttttttttg tagttcagaa	gccaaccctt	attttattaa	aatgtgtaca	agagatgggg	60
aaggaaaagg accagactgt	actgtggcca	tgtacacaaa	ggcatgcacc	acatcccagc	120
tctgctgccc tgggctgtcc					180
ctcatgaagc ccagatcttc					240
gaagaccacc aggtcagtgg	agtggagagg	ttttgtatat	ggtcttcttt	gaagaaactt	300
acttcttgca agccctggca	tcttccaatt	ggctgtc			337
<210> 1224 <211> 437 <212> DNA <213> Homo sapiens					
<400> 1224 ttttttttt tttttt	ttttttgtaa	tttaaacttt	atttcatatc	tattgttaaa	60
ttacacaaaa tcagtgaatg					120
aatcatggga tttacataat					180
caataatcag tatagacaga					240
aataacacaa aatgttttt					300
ttccaacaat acctatcagt					360
aaataccata gtgatctact					420
tctaaaacac tgtgact					437
<210> 1225 <211> 291 <212> DNA <213> Homo sapiens					
<400> 1225 ttttttttt tgtttttgtt	ttttttgaga	aagagggttt	atttagcaca	tctcagagtt	60
acagetetta cagaaagaca					120
gactacttga gttcagacgg					180
atcttgaatt ttagagtcta					240
tctgagcttt caaacttcag					291
<pre>&lt;210&gt; 1226 &lt;211&gt; 452 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1226</pre>					

<400>

```
cccggaacgt agtcaatctc ggctctgcgg atttcacaga acacactttg cctattgccg
                                                                         120
gctccaacaa gaagtaactt tccaggaagc tgccggcccc ggacgcgcca ggatcgctgc
                                                                         180
ctgcgctgcg ctggccgccg gggattcacc cggggaggcg gggccgcggg ggaaggctcg
                                                                         240
cggggaatac agcacacttt cccctaaatc cctcgtccgc gccgagtgca gggctctcag
                                                                         300
                                                                         360
agttcaccta gtcccacctc tcacccacaa cagtttataa atggggaagg tcagacaagt
tagtagcaga gctgggtcta gaacccagga gttcgaatgc aatccgaggc tcatatcgag
                                                                         420
                                                                         452
actttaagtt gtccgattcc gaagtttatt tg
       1227
443
DNA
Homo sapiens
<400> 1227 gacagacatt caagacaaac tgtattggaa atacaataat gaattttggc ctgatagccc
                                                                          60
tcatgctgtc ttatagcaaa acactaaaat tcatgcaaca gagaaattgg tgacatgagg
                                                                         120
actttttctc cagacttcct ggggaaaaac tgtgagaata tactttttc ttctgtttgc
                                                                         180
tttcgaaatg cattctttct tttgctgact ttcccaaact ttcccagtcg tttctgatga
                                                                         240
aaaattotto aataggaaaa gaccaggtaa acttacatga aagacatcaa gtatottttg
                                                                         300
agctccttct ctctgccaga ggagcaatca actggattac acaaaactac cttcacaact
                                                                         360
aaaacaggta gaattggaac aggaattagt tgtcattaat atactcgtaa taaaataaag
                                                                         420
                                                                         443
cttgttctga aaccacaagg ggt
       1228
453
DNA
Homo sapiens
^{400}> ^{1228}_{\rm tttttttt} ttcattgtac aatatcttta ttaaagaaat gcattccagc aacactgtca
                                                                          60
                                                                         120
qcatctttat taccaaagaa atacataact ttaacagata atctctgtat cttagttttt
gcctttgcaa aacaaatgga gatatatcaa ctctcataca attctaaaag cattgtgctg
                                                                         180
tgctgcctca caggggtacg ttcccagagg tttctctctc tagagcaatc cctaatagga
                                                                         240
caattgttca ctctgaggct tctggcttct tatctctcct ctcttgggga gctgctgctt
                                                                         300
ctctgtaggt tgcttccctg tgacgcaggg accatagttt ctgctctaat aacacctttt
                                                                         360
ccactctgac gtagctgagc catacactac attgccttag tcctgttcac cctttggtga
                                                                         420
                                                                         453
ttctgttcca tttgccacct ggcctcttcc tcc
       1229
541
DNA
Homo sapiens
<400> 1229
ttttttgagt gaaacacata ctttatttct gtataaagat tctttccagg agaccaggct
                                                                           60
                                                                         120
ggaaaacacg gaaacctcag gaatggcccc tctccactta tactcctctc ctcacaaatc
aggccaatga ggtcagttcc tgagtcccct ttctccagga ttccactcag tccttgtctc
                                                                         180
                                                                         240
ttagtgtcct gttgggggat aaggaggaga aggactcttg ttctctagct tctccgataa
aggcccccc accgcccctc aattactgtg gtctaggaac tgtgagttca tgatatacat
                                                                         300
                                                                         360
cagggctcct ccctgagaaa gcatgaggag gaagaggagg aagagattca cacaatacaa
                                                                          420
atatcacagt gacagcaatg agatctcaca ttttggaagt cacgtaacaa agatggttcc
ttgatatttc atattctatt actactggac attacaccaa gtaaacacac ttggataaac
                                                                          480
acagggtgat gcatttctag aataagaatg tgacccatgc acagtacaaa tcatggtgtt
                                                                          540
                                                                          541
       1230
422
DNA
Homo sapiens
```

	~^
tttaacaatt gcaaagattt tatttagcgg ctttctgtgc ttggccttag aaacagagtt	60
ccgtgcataa gggcaaattt ttgtacacct tttcttcata catattttac ataccctttt	120
attgccccct ttttcatatt cataatattg gattccccac taggcacata aatacattta	180
tctacaacac ctcaaaacca gaaactttaa taatatctgt attattttac ttggtattat	240
ttgcatttcc acaccattta aaaattttag cttgcaccaa gcttcacttg ctttcttacc	300
attaaaagat ttgaagggaa agggaaagat gaaggacaaa acccaaaact tcaaaatgca	360
atgtactatt tgataaaaat ggagatctaa gggcaggtag aagggtatag aagacccatc	420
	422
tg	
<210> 1231 <211> 211	
<210> 1231 <211> 211 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 1231 gagaagtgtc agtttaatga agccagctta tcagcagggc ggcggagaca cctgccccct	60
cgcaggtgtg cctggctcgg gctaaagtgc ctgtgcagaa cgaggctgcc tggcggggtt	120
aggagtegge geeetegtee teeteetegg geaggatete caggetgetg tegggetgeg	180
	211
gggctgtgtc cgtcgagggc ggcggggtgg g	2.1.1
<210> 1232	
<211> 306	
<212> DNA <213> Homo sapiens	
<400> 1232 ttttttttc agtgacttat caaaaattta tttcatataa taaattatat aatttattt	60
catctttaaa cagtctacac cgaaaacatt tttggaaaca tcttttcctt ttggtaaaac	120
aggttagcag gctgacatca gcttcatatt ctcatggcta aaatccccca cggttataca	180
	240
gttaagcata gcctttcttt gtatttctca agttgacacc acttgatata aactcagaca	300
atataaacat ttctagattt tgcctaaggc cttagcttta actgcagagt agtgagtagg	306
aaatta	300
∠210\ 1233	
<210> 1233 <211> 589 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 1233 ttttttttt ttttttaa tcagttaact ttagttaaat gagtttattt gttccttttt	60
	120
aagaacctgt tctaaaacac tgcttcttaa agttcaatga gcatacaaat cacctgagga	
the state of the s	
ttttgttaaa ctgcagattg atttagtaaa tctggggcag gcctaaagtt ttgcatttct	180
tttttttttc ttttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa	180 240
tttttttttc ttttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac	180 240 300
ttttttttt ttttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag	180 240 300 360
ttttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca	180 240 300 360 420
ttttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg	180 240 300 360 420 480
ttttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca	180 240 300 360 420 480 540
ttttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg	180 240 300 360 420 480
tttttttt tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt	180 240 300 360 420 480 540
tttttttt tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt	180 240 300 360 420 480 540
tttttttt tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttctttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt	180 240 300 360 420 480 540
tttttttt tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct cccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234 <211 > 408 <212 > DNA <213 > Homo sapiens	180 240 300 360 420 480 540 589
tttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234 <211 > 408 <212 > DNA <213 > Homo sapiens <400 > 1234 ttcatttgc aaatttaatg taactctgat accaaaatat gacagcaca agaaagcaaa	180 240 300 360 420 480 540 589
tttttttt ttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234	180 240 300 360 420 480 540 589
tttttttt tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct cccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234 <211 > 408 <212 > DNA <213 > Homo sapiens  <400 > 1234 ttcattttgc aaatttaatg taactctgat accaaaatat gacagcaca agaaagcaaa caataaagca ggaacagcaa acagatttt ccatcacatg acaccctcag ctgattggcc ataactgcct tgactgctg gtggacaaag attccaagga tgtactttgg ctccatggga	180 240 300 360 420 480 540 589
tttttttt ttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234	180 240 300 360 420 480 540 589
ttttttttc tttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234	180 240 300 360 420 480 540 589
tttttttt ttttttga cccaggatcc aaagcagtag agattttgca tttctaaaaa agttcccggg tgatgctgat ggttcttaa ggttctaaag ggtgttaaat tagccatgac tcgaattagc agaaaaaggg atgaaccaac tgtacacata atccaaaagc ccaggggtag acctcaggca tggctggatc cagagggcca cataatgtta tcaggaaata tatttggcca tttctcaggt tggacttcct ttgtgttaat ttcattccca agcaggctct ccccaggtgg tggcaagatg atcgcattag ctcaggctac atctagcagc tcacaggaac tcattccaag tgctagaagc ggctgcatca ctgacaatac tgtgccgggg gaactcttt  <210 > 1234	180 240 300 360 420 480 540 589

gtgctcggtc caccgctgaa	gccactggtg	cttggtccac	tgcagaag		408
<210> 1235 <211> 439 <212> DNA <213> Homo sapiens					
<400> 1235 ttttttttat agaatctagc	aattaccaag	acatttatta	gttgtcaaaa	agctttacaa	60
tcagtttcat gatcagaaaa					120
gaatttctga aaagataaag					180
gttccagaga tctgacccca					240
taactgagac ccatccgtta					300
aaagaagttg gactaagaga					360
ttagaaatac tttattctgc					420
gaattagctt gtttatttc					439
<210> 1236 <211> 110 <212> DNA <213> Homo sapiens					
<400> 1236 gatccctgaa gttgccctgg	tctctqcacc	ttctaaacct	agttcttaag	agctttccat	60
tacatgagct gtctcaaagc				•	110
			_		
<210> 1237 <211> 293 <212> DNA <213> Homo sapiens					
<400> 1237 gatcaaatta ttttctttt	tgttgtttac	cctatcctca	acaacatttt	tagtttaaat	60
tattgtagag atttttttg					120
aaagctattt tatgcttaac					180
gatgttctag agtttgatta	catgcagagt	tgtatatagc	caaaacttct	cttatcaaac	240
tctgttatgt aggcatattt	atatatacat	taaagactgt	tgtactgtgt	ctc	293
<210> 1238 <211> 229 <212> DNA <213> Homo sapiens					
<400> 1238 gcataaaaaa cacaatgvtt	taatttctaa	agcacttata	ttattatggc	atggttttgg	60
vgacaggtta ttatagtcca					120
aggtattggc cttttctctg					180
atatgtaaga crgcctcatc					229
<210> 1239 <211> 286 <212> DNA <213> Homo sapiens					
<400> 1239 ccactccatt gttttattat	gtacaaacgt	tacagaacgg	gggggacaga	cacgsgtggg	60
gtaagavggg cctgggggga					120
agaacacagg ccataactat					180
gccagccaga tcgaaggagg					240
cagtgcatgc aataaaatat					286
<210> 1240 <211> 294 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					

<400> 1240 ttttttttta cantaaangt gattttaatt tttgacattc ctggggtgat attccttagg	60
taagnaagta gnactgtgtt aaattcgcat accatgggca ctgcttcctg aggcagtaat	120
tnettteaaa geettteett eegtgtteaa taettteeae atttgtgegt ttgaatggat	180
ccatgtgttt agaccattat tttactaaac acaaaatcat ttggcacaaa aaaaaaaaaa	240
aaaaaacctn ttaccatact tntctggtca tacaganttt taggcaccnc agta	294
aaaaaaccin claccatact thicetyytea tacayaneer tagyoutons agoa	
<210> 1241 <211> 468	
<212> DNA .	
<del>-</del>	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 1241	60
cccttcnta nnaaatatct ttaataaaaa taggtttctg cagaacaggt tataaaacag	120
gaatagcaaa ctcaaattcc tgccacccag gcagagacga gtggagcagg tggaggggg	180
ctaacggaga gcccagagca gcaaccaaca cagagggacc tggtcattga cttgtgggtt	240
gcgtgcatct ttttttttt tttttttgg gacagagtct cactctgtcg ccaggctgga	300
gtgcantggc acgattcttg gctcanttca acctccacct ntcgggttca agtgattctc	360
ctgcctcagc ctcccaagca gctgggacta caggtgcatg ccagtacgcc cagctaattt	420
ttttgtattt gttagtagac atgggggttt caccatnttg gccaggggtg gtttnccatc	468
ttttggaccc cgngacccgc ccgttngggc tcccaaagtg ctggggtg	400
<210> 1242 <211> 515	
<212> DNA .	
_	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 1242	60
gncnnancng atggagtett cetetgteac ecaggetgga gtgcagtggt gcaaceetgg	120
ctcactgcaa cctctgctcc ctaggttcaa gcgattctcc tgtctcagct tccaaatttt	180
ataaaacaat tttacatttt aatccctgtt aaagggtgaa aggactcaga actttgacgc	240
ctgagaaaga gttgcaggtt ttggggtgat ggctcagaga agttttcgga aggagatgag	300
gtctcctttt acatgtttaa gcactagggc acgaaagagg ccacaaattt gttctgtgtg	360
accccatggg ggccggggaa ggaaatctag gactnactgg gtgggaagtc atggggcagt	420
cagatgtggg actcaattta gtgtaaagag ggacttttga atagctngga gcttttccac	480
agaggtcatc ncggggnacg gtnaccctca gcacttggaa gccatcaagc accaggttac	515
agaactcaac cgggcttttt taaaacggtt ttaag	
<210> 1243 <211> 478	
<212> DNA	
<213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<223> n=a,t,g or c	
<400> 1243 agaacaataa cattcttttt aattatgaat ctgcatatta gagcattggg ggacagctag	60
tetetgetet aettegette agetgaggtg gettggaggt tgggagtegg aateatetga	120
aggettgete gttttcacge gtggtggttg atgttggetg ttggctggag cttcantgac	180
tacagetgga atatetagtt gtggeettte tatgtagetg ettggattee teacageatg	240
atggctggat tccatggggg gcatctcttg aaggggttag tggcaaagtt tggaagagca	300
tgcaggacca gaaatggtgt tattgggtct cactggaatt tatggtctct gatcattcct	360

gatgccattc atgcagttct ggtgtggatg gtgtcatccc tttgcaaccc tccccgattt	420
ttggaagetg agaggeacat eteateteat gggeagtttt eetteeeeca getettge	478
<210> 1244 <211> 510 <212> DNA <213> Homo sapiens	
<400> 1244 taaggaaaac accatccagt ttatttttct cctgattcat ctcatgccaa cacacagact	60
tcaatggaca gcaggcaaaa tggggaggca tccccagagc aagccgattc tctacacact	120
gccttccctt cctgtaagac tcatcaaaaa ggcaccccaa ctttgcatgg atctgctgtt	180
ggtatteett ggggtgaage cagaagteag gettteeaca gagagaeggg actacatgge	240
cacctgggaa ggctagggag tcaaagggcc tgaggaatga ctacttccct ccacaagggc	300
attecetgee etgetetget teetggggge tteageaage etteetteta gageteetag	360
aaccctccca tggtcaacac aacagcagcc cagacaatga gatgcaagag gcctgagctc	420
acaggccatt caggtaagcc agggtgagct gggcagctag atgacccaat tttcagtcca	480
gaaageteta tetgetggae taataettee	510
gadagoooda ooogaay	
<210> 1245 <211> 407 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1245 gtttgtttat ttttacttta ttatttttt gaatactgac aatacacagt tggttgaatc	60
catggatgtg gaacctgtgg atggaaagag ccaatttctg agggtaacaa atgggaaaat	120
gatttcgttt gagtctaaga ggttggcagc nttccaattc ccctctngct gagtgtagcc	180
aaaagaagtg aatggttagc acagggcttg gaatacccaa gtcctcaaaa atgttggagg	240
gtatgagaga aggggtaatc ccaagatgag gtccctggag aaaggancct acagttaagg	300
gccacagcag gccttccagc caaagatggc cagctattac ccacttcctt tttaatccag	360
ggtangtaga tggtccatnc ctaatgntaa taaggngggg aaaaaag	407
<210> 1246 <211> 355 <212> DNA <213> Homo sapiens	
<400> 1246 ccatttcaat ttgtatctgc tatcctattt tttttttttt	60
ttcctttatt tgcaataaat ggttgtggat tacttctgga aagcagtaaa tcctaaaatt	120
gaccatagc catttattcc taagaacata aaaaatgcaa agatctaaaa aattaggaga	180
caattcaaaa ccaatgatat aatttaaata tgttttgtga agaacagggg tgcatgatct	240
tgtttttcat atcctctcat ttgtaggcag aatgtgtaaa tcatgtacaa gtgaaatgta	300
tcttctttgg tatgataaaa ggcaaagtgt cagcttggtt gataaagcag ataga	355
<210> 1247 <211> 448 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1247 caagccatga aaagcctttt aatgacaatt ggcatcacag gtataaataa atatcttctt	60
ctttccatct ataatatgtg ctacaaatat atttttcaaa ggtccaaccc aggttaggag	120
getteaagga ceetteetta getactgatt ttagtaatta aaaaaataaa cacaataaac	180
acceptage tettiging egececety eggagageat egagggetyt eaggeatett	240
cctcctgcag ccgcagccaa tggagcacac ggagaactgg agtcaggtga tcacgaaggg	300
Colocogoday Cogcaycoaa cyyaycacac yyayaaccayy ayccayyaya	

gcttatttca ctgggcgtgg tctacgttgc cacatgtgtc gctttgggat gaatgcattt tttncaatgt gctgcttaca caattatgct ggttccaaaa acacagttgg attggacaat ctaacatagg attttaatcc ttagaggt	360 420 448
<210> 1248 <211> 253 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1248 gcagggtggg atgctttatt tcactgtggc ggggagggaa cctggacagg gggcggcagg	60
cggggtgggg ggctggnact caggcgggga ctaggcaggg gaagggctgc cccagnctgt	120
tgaggagaaa ctgaggccag ccctgnggaa ganctagccc agcngggtaa ggagggtggg	180
ggaaaactgg gtctgaagga atgagggccc cctccctctg ggctttcctc ctagagggcc	240
tcagtccctc ctg	253
<210> 1249 <211> 476 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1249 gttttctcaa ctttattgtg gacaggagaa gggtaagtag acttgaaggt tttttatttt	60
ttaatgaaga aacaatttat cetgtgtttg ataccagatg agactgtaag ggtcacatac	120
teettaagee tacacateaa tteeaggtga agtgetteag gettggetea ttengacace	180
tangaaccga anaangggcc cntgnnggnc angggttggg aagncctgtt tttgccttag	240
ngccgtgcag gtttggggca ttatataaac ttttacaggc ttgctgaagg gaatggtgcc	300
ctcgatgctg gtttccacct gtggtgacat ctcaccaccc tccatccagg ggcattttgg	360
aatgcgagca ctggagttgt aggccagcag cagcctcact tccacctggg catgcctctg	420
gtccaagcgg tgtgggatag ataaacctga gtgatgaagc cggtgccgcc ctgggc	476
<210> 1250 <211> 416 <212> DNA <213> Homo sapiens	
<400> 1250 aatgtacatc atatttttta tagaagtgat tatatcacaa agaaaaatcc tgccaaacaa	60
ctacaaatca agaatctgtg ggcaaaaagc tcaattcata caatgtaaac acattgaaaa	120
aacaaatgca aaataaaaaa agctgttgat acatcacctt gaaaaattaa cacaactaaa	180
ttaagggcta tagaaaatgt gttcagctta tatatcatac acgtcattta acttgaattt	240
tacaattttt aaactaatag aattcagatt tattacttga aataatggta tacccagctg	300
ttcttcataa tggcaagcat attccatata caatacaatt tatttagcat agttttatac	360
tcttaagtaa aatatgttag tggattaaaa gcataaagga ataaatatgg cccagc	416
<210> 1251 <211> 144 <212> DNA <213> Homo sapiens	
<400> 1251 catttcttat aaatttatta cataataata ttataataat tattatcaat aataataata	60
taagaaacat agatetetgt ggggegtate acaaegteag ggteaggagg eeteaggaet	120
ggagcagggg gtgaaacccc ggga	144
<210> 1252 <211> 473 <212> DNA	

```
<213>
       Homo sapiens
<220>
<221>
<223>
       misc feature
n=a,t,g or c
<400> 1252 cgctctttac tttttattca ctcacaccca ggttctttcc acaaagggtt caaggtagtt
                                                                             60
acaagaatta ctactgtttg gcgtttgctg aaagaagtac gtgagaatat tatatgcttt
                                                                            120
agaaaccaca gagtcgaagc ctgtcatcgt cctcatagac caatgagtag ccacacgtac
                                                                            180
ttgtttggca ttaccaagtg tccgggcaag gccgcagcct gcagctcacc agccgtgctg
                                                                            240
cteggeetgt geaegteace ggetetteee tagggtaget tttgettget tteteecaeg
                                                                            300
tecatectet etetetetgg acteaeagee ageeaggttt etageettgt eatteetaaa
                                                                            360
actactgcct caagccaggc ggggcgcaca caaacttaaa atgctaatct ccacagcggt
                                                                            420
gtctggacta atgggtgtcc cccaccgtgg gaatgtatgt gagctaaaga can
                                                                            473
        1253
409
DNA
        Homo sapiens
<220>
<221>
<223>
       misc feature
n=a,t,g or c
<400> 1253 agtctagatg aatttattgc cattcacata tttcatagaa aaaaagatgt agcaaacggg
                                                                             60
                                                                            120
tcagggttgt acaaaaaaaa aaaaaaatcc aggtttatat aggttgctct atttacatct
gagagcacag ctgtcctggc atcaggcaca gcagctgcac ttgtctgacg tccctttgca
                                                                            180
gatgcagccc tgggcacact tggcacagcc cacaggnang canggagcag cagctcttct
                                                                            240
tgcaggaggt gcatttgcac tctttgcatt tgcaggagcc ggcacaggca caggagccaa
                                                                            300
caggegange aggageagtt ggggteeatt tegaggeaag gagaageagg agtteeegat
                                                                            360
tcaagaggaa aacacgcagc gggacagatt ctcgtgccga attcttggc
                                                                             409
        1254
423
DNA
Homo sapiens
        misc feature
n=a,t,g or c
^{<400>} 1254 ctgattcagg atgttcactc ctgtgttatt tattatatag aaagatcaag gggactggtt
                                                                              60
aaactagaca tatcacatcc agccgctgct aaaaactaaa gggaaatagt aggtgacaaa
                                                                             120
agcaggggtc ctgaacagtg gtgggctcag gggattggag ttttttcctt tatgtttttc
                                                                             180
                                                                             240
tgtattttcc acaatccacg cttttcattg ccattccatc agatgatgtt aaggaggaac
acagatecag teacetgagg ggataettee teactgecae etteteaggg tttagaceaa
                                                                             300
catgtgggtt ctagtttccc ccagncccaa agctnttccc tngcaaggaa gagatcagtc
                                                                             360
ttttgagcaa attttggctc aagactaaag acacagaagg cgaggctcct gcatgcacag
                                                                             420
                                                                             423
cac
        1255
452
DNA
        Homo sapiens
        misc feature
n=a,t,g or c
 <400> 1255
ttttttttt cttcttccct tttctttccc cctttaaact aagatagcag taatgcatct
                                                                              60
ggacgtttga cttctaatag cttcctgcca cgaaccaatt gacacaaaac agaatagctt
                                                                             120
gttaaaggac agatttttc ccccttcagg gagncaaagc attaacatgt catttcctga
                                                                             180
```

ccaggatatt aaatagttta tttagaagaa atgagttgaa gtgagcgatt aagagacaca aactggactt ttgttttctt ttactgtagc acccaggttt catgtcagtc tgtgtgcacc gaatttttt tttaagtgaa cctcattaat taccagctag gtggttggct tgtttaaaagg aaaaaaaatt cttgggcaa ctgttccttc cctggaatcc taacaagaag ttaaatgcta acagtgcgat gccggggtgt gtgtttgagg ca  <210> 1256 <211> 289 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	240 300 360 420 452
ttaacaggag acaggggtt tattattact caaatcagcc tccctgaaaa tttggaggct agggtttttt aaaggtagtt tggcgggcag gggttggagg tagagcaatg tcatttagct tgctcacttc catctgccag tttggnagct tcttggctga nagatggcgc cgggcatgct tggtcaaatg gtcactcctc atgaaccgcc ggtcacacat ggggcacgca aatttcttct cacccgtgtg ggttcgcctg tgtctggaca gttcancaga acgggcaaa	60 120 180 240 289
<pre>&lt;210&gt; 1257 &lt;211&gt; 111 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1257 ctattttttg tataaacaaa attgcacagg tttatttgcc acctccgcct cctcctgcc tgctgctgtg tgcccttcca cctgcagctc aggggagggc ttctctggcc t &lt;210&gt; 1258 &lt;211&gt; 399</pre>	60 111
<pre> &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c  &lt;400&gt; 1258 acacgttcag gggcctttat tactgcgggg ggtggggggg ggcgggggtg gttaggggag</pre>	60
gagggagact aagttactaa cagtccagga ggggaaaacg ttctggttct gcggatcggc ctctgaccca ggatgggctc ctagcaaccg attgcttagt gcattaaaaa gtggagacta tcttccacga atcttgcttg cagaggttaa gntctgtctt tggctgttag aaaagttcct gaaggcaaaa ttctcataca cttcctaaaa tattntgcg aagagtaaaa cgttcagcaa acacattnat ttggaagttc cagtagttaa tgcctgggca ntttttttgc aaggtgaggt tttgtctaaa ggccccanca gggcacaatt atctcccng	120 180 240 300 360 399
<210> 1259 <211> 423 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
caagtgttag gccacagcac aaacccctct gtccaatcac aaatgtccac aaatttgcaa agtaactgga cacgaacgat atgettetea aacteacaca catattegte cateacacac acacteaaat gataaagaan tacattgaaa teetetacaa aagagatetg aggacagtan teagatgace teatgtgegg acagcetntt gcagttaca gtctaatcca tttggteete acantageee tgtgaggata ageageacag ggattactnt teacacegtt ttgeaggatg agggaaactg aggeteaggg gatgtgtaaa caccageeta aggttteea gttgggagac	60 120 180 240 300 360 420

tgg					423
<210> 1260 <211> 440 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 1260 ttttacnnnn ctttggattt	tttattaagt	tctgcaataa	ataataggtt	tataagttca	60
ccctgttgtt ganctcatca					120
actetgetae etettagete	tqqaqqqtaa	aaagcaaggg	ccagagcaaa	tacattgggg	180
agaggggag aaaaaaaaa	tcaggctatt	ttaatagccc	tcacatgcca	agtgcttttg	240
attcatcatg tttagttttc	ataagcttgt	gaggtagata	atattatccc	cattttatag	300
atgagggaat ttaggctcca	atqqqqntaa	ataacttgta	caagnacaca	tactggaatg	360
actgccatga gggagggaat	gtgaattttg	ggtcacgggg	ccaacaccct	acactcttcc	420
taccentgee acactgggea	3-3	55 5555			440
<210> 1261 <211> 211 <212> DNA <213> Homo sapiens					
<400> 1261 tttgtcaaga gccaagacac	aggtaatgca	cgacattgat	tgctgcattt	taccttcaaa	60
atatttgtcc ttattgactg	ggtctcctta	attaatgtac	acatgtcatt	agaatgcaga	120
cggaggggac tcaccatgaa	tatctggggt	tgattcccag	atgtgtgttg	cttctctatt	180
gcaagcagat tcccttgtcc					211
<210> 1262 <211> 341 <212> DNA <213> Homo sapiens					
<400> 1262 ttttttttt accccagagt	atttttatta	gggattcctg	ccaccatatt	aacatataaa	60
acaatctgga tgttgacata	gaaatgcaaa	tttcactata	caaaggtaag	gctccaatca	120
cagtaacatg gccccatat	ctctagtatt	tcaatgaaat	aaactcattg	tgaattcacc	180
ccgagttgtg tttataaata	ttagacaaac	cacaaaatat	attccaaata	cataacattt	240
tacaatattt ttcaagcaca	gacaaataca	tactttactt	tacctacatt	gttttcatga	300
tccaacttgc attagcacta					341
	33				
<210> 1263 <211> 342 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<400> 1263 gaccagtccc cccaccattt	taatgcaggg	gtaaactgag	gctctgagca	ggccagggtg	60
gagtggaaac acctagagga					120
gggaccaggg gctgtctcct					180
aagcctcgga acttctcgga					240
tgcttattcc cttggccaac	tcaagggaag	acgcttctcg	gggcctccaa	aaccctngtg	300
ggtngattcc atgtaactca					342
<210> 1264 <211> 510 <212> DNA <213> Homo sapiens					

```
misc feature
n=a,t,g or c
^{<400>} 1264 tttttttgtg tggtaccttt tatttagtca gtcttcattt aaatgtgtgc ttttgaaatc
                                                                             60
actaaatatg accttttcag aattcaattc tcacagtatt tacagtgaac tttgtgcaaa
                                                                           120
caaatccccc tttgtgcaaa gggggagctt cctgctcccn ttggcacatt aataacttac
                                                                           180
aaattcagat cacaacaaaa ccccagactc tagttttctg tttgaaaggt actgagctgg
                                                                           240
gataatgggt tgctaggaaa gagctaatgc aagcccaaag gaaataaaat gttttcttta
                                                                            300
tcagaaaaga ataataacaa ggcctcactc tccaaaggaa aacagacgtc ccaagatgtt
                                                                            360
gtggaacagt aattaagtaa ccaaatacaa ttccaatggn ttatttcacc ttcatttntt
                                                                            420
atacttacnc tcatctcttt taattaaata agcgaaacca ggaaagtgca nttcgaaggg
                                                                            480
                                                                            510
actctgaact gtcaggggaa cgttntaaaa
        1265
396
DNA
Homo sapiens
<220>
<221>
<223>
        misc feature
n=a,t,g or c
<400> 1265
gggcggagtc agatcggctt taatagaggg agcctgagga ggctcgngcg tgcgggcncg
                                                                             60
gccagccccc tcctacttgg ctgcggctgg cggtggggcc tgggcgacgc tggtgcggcc
                                                                            120
tggatggaca ggactccctc gggggacagc gcggacgtca cggcagccgg atccacgcca
                                                                            180
ggeggeagge ggtacgaegg tggaactege gegegaegaa teegtgetea teegggeget
                                                                            240
cctcgtggcg cgcgtgcacc tccacgtgtt cgcccaccac cttgacagca atttcctccg
                                                                            300
gegagaagtg etteacgtet aageageace gaaaagtnge eggggteegt eggnacetgg
                                                                            360
                                                                            396
ggcgacgggc aagcgcacgc tgggttgcnc gcaggt
        1266
586
DNA
Homo sapiens
        misc feature
n=a,t,g or c
<400> 1266 gtttttttt aagattccac ttctcagttt atttctggga ctaaatttgg gtcagagctg
                                                                             60
cagagaaggg atgggccctg agcttgagga tgaaagtgcc ccagggagat tgagacgcaa
                                                                            120
ccccgccct ggacagtttt ggaaattgtt cccagggttc aactagagag acacggtcag
                                                                            180
 cccaatgtgg gggaagcaga ccctgagtcc aggagacatg gggtcagggg ctggagagat
                                                                             240
 gaacattete aacatetetg ggaaggaatg agggtetgaa aggagtgtea gggetgteee
                                                                             300
 tgcagcaggt ggggatgccg gtgtgctgag tcctgggatg actcaggagt tggcctggat
                                                                             360
 ggtttcctgg atccacttgg tgaacttgca gaggttcgtg tagacacccg gtctgttggg
                                                                             420
 ccgggcacaa gggtaatctc cccaggacac gagtccctgc agggagccat tgcagaccac
                                                                             480
 aggcccccca gaatcaccct ggcaagagtc tctactgctt tgtcaccggc gcagaacatg
                                                                             540
                                                                             586
 gtgtcactat ctgtctcngg taanatcctc gcacttttct gactta
        1267
363
DNA
Homo sapiens
        misc feature
n=a,t,g or c
 <400> 1267
tttqtcattt catttagttt attagacaaa aatatatgat ttagacaagt tcgctgacgc
                                                                              60
```

```
120
gctatttaca atctgaaacc actctatata cagaaaaggg gggaaagaga cacaagcacg
tgggggcatt taccgaaccc gataatcgca gccactggag ccgccggaga ggctgggcca
                                                                         180
cctggacgcg agctcgggac cgaagaagcc cctttctgca gaaagcgacg gatgcgagtc
                                                                         240
cttgacgtcg ttgtcatatt tgtcctttac accagtntga aatatttgnt cttaaantcc
                                                                         300
cctcgnggcc gaattetttg ggctccgagg ggcnaaaatt tnccccatag tggagttcgg
                                                                         360
tat
                                                                         363
       1268
479
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1268 tgtagttcaa taatattta ttgtcaatag cataggagaa attcaatatt gaatctcaga
                                                                          60
acaagaagaa cctatttaca atgcatgtca aggaagagat gggagaagga atgtcacaaa
                                                                         120
attttttggt aaatacatat tttttataga gaagtaatcc atgaacctgc aacatggata
                                                                         180
gcttatccaa ccaactttac aaattactat taatataagt tacatgcttg ccatctaaag
                                                                         240
taactaaacc catagactga aaaactatgt gtcaaggtaa cgtgagcact ttaatcactt
                                                                         300
tacttatatt ttctaaaggc agtagtttcc tctccttttc ccgctatcca tattaggatg
                                                                         360
aagagacaag ttcctttcca acaccaaatt ctggatatcg ggctattggt ggaggaatcc
                                                                         420
ctggtggcga gtcagctaga agcccctggc cacccaggnc caggtggcca acccaatgg
                                                                         479
       1269
513
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1269
ttttttttga aagccgtaac atttattgaa gagcggacat atgtttgcaa atcacagtgt
                                                                          60
gcatgggcat gcattacatg gttcataatg ctattccaat taggcttttc atagtgcctt
                                                                         120
ctcataacgt cctttaaaaa aaataataac tgaaagggaa aagaaagtgt caattgcaat
                                                                         180
tacatttaca aaaccaaact gctgctttca attagagtga atctgtgctt cgctactcag
                                                                         240
                                                                         300
atatacacat gtagattttc caaggeecat gcacacatt ctgtagggge agaaattttc
tatgaataat ggctttagca acccgaatag tatctctaaa cattgacaag cttggggaac
                                                                         360
agggcaacaa gtgcaatgaa caatacaatt tctaacgttt gtcccagtca acataccact
                                                                         420
ttgccctgga qatatttaac acagcatttc atttttggaa tgataagggn taattcntcc
                                                                         480
aatttanggg gattatacng aatataccna taa
                                                                         513
       1270
386
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400>
       1270
ageggcacaa aacaacaatt cattttattt ctatcagttc cataggttga ttgggctcag
                                                                          60
ctagttggtt ctttattaga gtctcacaag gatgtagtaa gataatagct gtggctgaag
                                                                         120
tcctctgaag gcttgttaag gctggacatc caggatggct cccacacatg gctggaaatg
                                                                         180
atgttggctg tcagttggga gcttagcttg ggatttcagc tggagcatct acacaggaca
                                                                         240
ectecatgtg gcctggactt cacagcatgg tatctgcaag gagatggaga atgcccgtgg
                                                                         300
aaatgggtgg gatataaget teeggeaaat tgeaageaea aaatteegat enaaageeee
                                                                         360
```

```
caaaagcacc atcaaaacct taaacc
                                                                          386
       1271
403
DNA
Homo sapiens
<400> 1271
aatattaaac caatacttaa gttcctttac tcattgttga gacagactat tagtgtaggt
                                                                           60
gtactttcat ttatatgttg taccaataga ggttaaaagt atgaccctat cggtaatctt
                                                                          120
tttaagcaaa taaaactgtt tggatgcttt cccaggacga ttggattgcc ctccaggcgt
                                                                          180
atctcttcaa tgcggtcccg gatgtaactg gtgtcattag ccttgcagaa tgtgtcatct
                                                                           240
gtaattgaag ctatgttgtt gaactgaaga tgaattacac gtagactttc tggtaaatta
                                                                           300
agaggcacgg attccagggc attatgggtc caagtacgag gaaggtgagg ttattcagtt
                                                                          360
ttttgaatgc atttgctttg attcccctac tcttgatttt gtt
                                                                          403
       1272
410
DNA
Homo sapiens
<210>
<400> 1272 aaaaaaaaa caatatttag totttotggg atatoagott otgootaaat tgtgagaggt
                                                                            60
                                                                          120
ggtgtttcaa aagacacacg caccagtggc cccggggaga gctgcattcc aggttcctgt
cctacgtagg cccctacggg tagctgggga caccagtctc ctccactcac ttggcaggag
                                                                          180
tcaggactgt ccacctcttc aactggcaca aggcccaagc agcatggggg ccctgagtga
                                                                           240
aatggagggt cccacactgc ttccaggaca ggactgtcgg gggctctcct cacccctgac
                                                                          300
tggcccacag cagcaggctg ctcctggcgt ttggcagcag tcgtgatggg gctgcagcag
                                                                          360
ctggtgagtg gagtcgtcgg gcagtgtgta taagaaagag ccctcgtccg
                                                                           410
       1273
434
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1273 ttggtgggta gctaatatgg tatatttatt tcacagtttc acatctttat cattgttttt
                                                                           60
atataaaaac aatgettaag tggggtttea gaacagatat tteettttaa aettttttta
                                                                          120
aaaaatcaca aatatgattg gctcatacaa ccacatttca cctcttttca ccagcactcc
                                                                          180
cacccattcc cgttagaaat attttgttaa aaaaatcagg tgatcaaact catagaaact
                                                                          240
gaattgtgag aagtataatg gggaaaagga atgagaacct gtggctctag gggagttaca
                                                                          300
gaagggaaat catcttttag agcccttggt ttatttctga caggaaaggt aaagccgtgc
                                                                          360
atttattaga cccqqqanqc tanqqaattt aaaqatqqcq aqattqtcta aaataactqa
                                                                          420
ggctgaactg ggaa
                                                                           434
       1274
408
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1274 ttctggtcat aatgaaacac tttatacaga caggaataga caagggattt ctgacacact
                                                                           60
catgctttgg atgtgtcagt acaagacagt atgtgagact gtgattctgc caggcagagg
                                                                          120
ggaacgggca tgatttatct gctggcaaat aagtctccac tataccctaa tcattctttt
                                                                          180
atectaagtg cateatgate teettagtee tgggaegtea aaatagteaa ttatgggete
                                                                          240
cttggtaatt teetggtaaa ttaetgetee caggateetg gtetgaenga ngteggtnat
                                                                          300
```

360

ggggaatcgn tggtggaggc cgtgctgnat ttccctttca agcanacctg tcagcgtggt

aggnggccaa anggatttcc ccctgatggc agtgaccacc acattgcg	408
<210> 1275 <211> 613 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1275 tagggggtct gttttataaa tattttctta tcatactttt attataaact tttttagtat	60
gaaatttgct tcaactgtta caaacagaat catttcctat ggggtcccct ccacataagg	120
aagttattcc tgtaattact atttttaaat agtcttctta actgtgggaa aactttaccc	180
tececeagea egeacaeaca tacteteetg tgatgagget gaatgetate cagtgeactg	240
gttcagtcag caatctgccc atgttcctgg gagaaatcag tcccagtcct tttgctgtca	300
tggtgtctcc agagccaccc ctttctgtaa caagcatttt gaaattcatc catgctcatc	360
tcatttggat ttcaatgttt cctcccactc aacagccgat tcggagttct tgggaattgt	420
tggaaatatt gattgcattt tacttcgaaa gtcgttcata ctgtgaactc ccaaagcntt	480
ccagactgcg acgaaatcac accaacccca caccatgcat acagggagnc ccagccaga	540
gctcgcaagg caagggnaga ccgcnttccg ggaatgcagc cgtgggcaac ttcccctaat	600
ggaccattcn ggg	613
<210> 1276 <211> 484 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1276 gegtegaett gagtetttgt accagaaage aatagtnget geceatatag egetgatgeg	60
gaggaagtgc ttgatggcct ggacttcctc tccctgaagt agactggaag cgtgacacat	120
teegageeat ceaeggaagt getgeagace tegtacaega aaatgteate eegaggeatg	180
atgtggttta aaccttcatc catttggaaa attttgtgga atcggtgatt atacacatct	240
gcgaccacca tattttctgc agcaatgcca gacagcctgg agagagcctc gcacaggtcg	300
gacacagece cegteagegg cacagteaca eggtactgag taggtetgea gtgagggtea	360
gcaggaacca ggaaaacctc ataactcgat ctttcttcaa gggcagtggn agcgttagat	420
agcaaaatgg gtcaaaggtn ccggaaacct nngcaanttt tgggnaaacc aagtngattt	480
naaa	484
<210> 1277 <211> 512 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1277	60
tttaaaagta tcaaataatt ttattatgaa agataagcca tttattgacc attcactttt ctaaaaaaac acaaatgtga gaataaaata aacataccta agactnactg gcccctccag	120
gacaggaagc agccttggac angaqagcct gcaaacggag ttnccttatg nnnaatqtct	180
gaacttetea tacattetag gattteatgt ttegttacaa aggaaaggaa actggetaga	240
agattcatgt acaagaaggt cacaacttta aagctatctg acgctaatga cttgtacaat	300
ctggtttgca aactctgaga gacagtatca aataagcact gttcaaagac tactcccagc	360
taatcettta etgteatttt etetttgaaa ttgtetttgg gaetggntat gtneteaetg	420
tagcttccgt ttatcccaca gccccaaanc cctanagtcc catggtgcag tctccatgtt	480

<400> 1282

caaggtataa aagtctgttt tcaggacaan gg	512
<210> 1278 <211> 456 <212> DNA <213> Homo sapiens	
<400> 1278 taagagagag ggtctcgctg tgtcgcccag gcttgggtgc agaggtgcaa tcatagctca	60
ctgcagcctc gaattcctag gatcaagcaa tcctcctgcc taagtctcct gagtaactag	120
gaccataagt gtacaccacc atgactggct aattttttac ttttccgtag agatggagtc	180
ttgtgatatt gcccagcctg gtcttgaact tttggcctcc gacaaccttc ccatcatggc	240
ttcccaaagc attgggacta cagacatgga ctagctccat ttcttgatgt gaggccataa	300
gcagaaccaa gcagactcaa ggcccttggt tgcttggaca caattagcta ttaataacat	360
ccaggaaaaa gctcagtctt ctgagtcagg aaaacctggg ctggagtcct ggctacactg	420
gtcaccagca gcagaagcct gggcaagatg cttcac	456
<210> 1279 <211> 410 <212> DNA <213> Homo sapiens	
<400> 1279 ggtatttaga aattttttta attgaaattt tgaaaatttt ttgactctaa aaaggtatta	60
atgaaacata aaacttaaca atgaaggcag aagaagaaca tagtagaaac aattactaca	120
aacattttag cttccaattt catataatgt tatacagttt agaaggagat agtctattcg	180
ttaatagaaa tagtaagtgt actttttag cttctgctgt gggagcatgg catacaccag	240
cttgggtggt ggggaaageg ggtetgtaat gttecageet etggttgget ceateggetg	300
cttttgggca acacccagct ttagagatct tttttgttac tttctgactt tgcttattct	360
ttttcttttc caaccaagaa catgctaatt ctttgaaaat tagtttgcca	410
<210> 1280 <211> 434 <212> DNA <213> Homo sapiens	
<400> 1280 atatagaaat aactttaatt aaaaaactta catagaagat tataatatca gacgtgacaa	60
agatttgagt ttatttgcct ggacaacttg ggtttgtctg gcttttgttt tctttttctt	120
taaaaataaa tgtacagtaa aactacaagc aaaagtttgt cagtattgaa ttgaattttt	180
taccccttaa aaggactagt ataatttcca atctctaaca aaaacttagt gtcaaatctc	240
acagataagg ccaaatggca gatattttca gttatgtggg tagtacaact tgagtaacct	300
tttttacatg acaaaaagtg agttatataa attgtcctca actttcacat aggaaaaaaa	360
tggtttaata gcttcaaaag gaattttctt tcatgtatac tcttcagtat ccaatattga	420
agctttgttc tttg	434
<210> 1281 <211> 314 <212> DNA <213> Homo sapiens	
<400> 1281 gtgtttctgg gtcacttcct ccatcactat ttttattttt ttccttaaac tttatttttg	60
gcttttctgt ctctgtagag accectectt cttctgcttc ctgttcccca tcagaatcac	120
tatgcgaatc tgatgatttg gattcatcta gggtgccaag tgaattttca ttgaccttac	180
tagaaggcag atcactagtg tgtggaatga aatcatcagg tttctcccat ccgggatccc	240
ccggttcctg aataaaagta atagggaaaa ccatcttcac ttaaaccttc tacccaaacg	300
gtetteactg ctgt	314
<210> 1282 <211> 442 <212> DNA <213> Homo sapiens	

```
tttttttt tttttttt tttttttt gcactgggct gattgtattt gcataaaccc
                                                                            60
aaggagggga aacggcaggg ccagcggtag gctgagctca ctggcagtag aaatcccatt
                                                                           120
tgtctqtctt cacatcgact ttgccaggtt tcagggtctg gtcctctcgg acaatgctac
                                                                           180
tggggaaata gcccaggcga gcagccagat ctccatagta atctccctga acgctgcctc
                                                                           240
                                                                           300
cccagaagaq ccgccacgg ccgttcagct tggagaagac atacaccact tggccccggt
gaatggtcag gaatcggcag tcgggggcca tgtagtcctg aagggccaca gcatgtgaga
                                                                           360
taggqtqqct qcactcctqq tccqcacaca gcttccgqtc agccagcttg ggcataggac
                                                                           420
caccctgac accaggtccg ga
                                                                           442
       1283
350
DNA
Homo
            sapiens
       misc feature
n=a,t,g or c
<400>
       1283
gccgagccca ccccgccctc tcccgcccgg gtccgcgcac cgttccgctg cagaaagcgc
                                                                            60
aggccatece ggtatecetg ettgcacate tetegcagea ceaggggete eggegggaag
                                                                           120
agggccttgg agaggcggta gaggttgcgc aggttgaact ggatgctggt gttggtgacc
                                                                           180
cgcagctcgt ggatgttggt ggagctgtcc tgcggacnag atgtcactct cgcccgagaa
                                                                           240
gggggacact gtgatggtgt tcttaagctc atagagtggc aggttgtctg aaatgccacc
                                                                           300
                                                                           350
atccacgtag cgcttccacg ggacacacag acaggaccgt atgtgagggc
       1284
420
DNA
Homo sapiens
<400> 1284
aaaactttta aagaagttgt ttattgccaa taattaaaga gctcaaaggg aagtcattta
                                                                            60
accatqaqat tqccaaataq aactctacaa cagctgattc aaccttttta aaattttccc
                                                                           120
tggggagaga cttcactact atctctgctg atggactcca tagttctcat actttacctg
                                                                           180
aaagttette etaacatetg ateteaacet ttettgeegg ggeattggee tgtttteeea
                                                                           240
gccaagcett gtttttgttt ttgaggaacg aacagetttt ttgggtacag accaggagte
                                                                           300
catgggtctt gaggacctct gtgtatttat cagttttctt ctccacattc tttttggcct
                                                                           360
gtctccatag acttgtgagc cccatgcctt gtttaagggg gaaaaatggc atttccctac
                                                                           420
       1285
239
DNA
Homo sapiens
<210><211><211><212><213>
       misc feature
n=a,t,g or c
<400> 1285 ctaaatgctt taattttttg tcacaaatat ttctgcatct ctcagtccct tcttgttgga
                                                                            60
aaaaggaggg ctagtgatac atttgttaat ggcactttta aaangtgctt tggtatatag
                                                                           120
aggnaacaat gtacttcnna ggnatgttaa taataaatta aggttataat ggttgccata
                                                                           180
tcngagngaa tgnataagat tagtctcagc aaaaacaaaa attagtttgg aagtagata
                                                                           239
       1286
160
DNA
Homo sapiens
       misc feature n=a,t,g or c
<\!\!400\!\!> 1286 ccgctcaccc tgatagcctg ggtgttgata ttcactttac ccgcactcag acacaggcga
```

ccttgaagca gttctcggtg gctgtgtgcc tgtncgctac			ccccacagcc	tccccagata	120 160
<210> 1287 <211> 310 <212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<pre>&lt;400&gt; 1287 cagtgttgta ccatattgaa gtttttcatc cagcccccag atgggccaaa tcccatgcct aatgcattta tgtactgtct cagagaccat acagtgccct aatcgttatt</pre>	tctatgttgg atggtggtaa gtggctccct	tctgtgtcag ataaagtttc ctactacaac	ggattggcaa actggaatat tagagggttg	actacaaccc agctctgccc agtagtgcat	60 120 180 240 300 310
<210> 1288 <211> 340 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c					
<pre>&lt;400&gt; 1288 atactaaaag ctatttaatt atatatcaat aagctgtctt agctttagtc cccattcatc tatatgggtt agacaggnaa gcaataaagc atcatggaag ccccaaatca ctgaattgta</pre>	aaaaaagtga aggggcataa acattctagg gttttaagca	actcaggggt cctgtggaga aagancgaga gtatataatc	tgcaaatgac aaaatcaggg ttctatgtat	cacacatctg aattatgcag aancttaagg	60 120 180 240 300 340
<210> 1289 <211> 265 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c					
<pre>&lt;400&gt; 1289 gatgtttgtc attttattt cactcaagac acagtcatgc taaaataaca atattgaaaa tggnaccata ccatcagcag aaaagnccnt aaataccttt</pre>	acaatccata caaaaatcct gnctacaaaa	tttcaatttt taaaaagntt	ctattgcttc ggntgctgag	aaccacaatt gtcagaaggn	60 120 180 240 265
<210> 1290 <211> 381 <212> DNA <213> Homo sapiens					
<pre>&lt;400&gt; 1290 tttaccagtt tttaaacttt acatattttc atatatttta attgccttca atattttact attcattata aatgattgta aacaagtgaa ctattattaa caaagatgaa cttaattata agtttaaagc aatatttaat</pre>	ttttttaaac aattagcacc aaataaaatg ttttatctct ttagtatcag	tctcataact gtataccttt atcatttcaa ttttttggct	ttgcaagcta taaagctaac atgccaaatt ctacgcacaa	gcagtaaaat tggaacattg aatctcaaat agatgtattt	60 120 180 240 300 360 381

```
Homo sapiens
<400> 1291 ttttttttt gtactcttta aatgtacttt taatgtattt taaagaaatt ttaaatgaga
                                                                           60
tatttaataa tacaagtatt tgagagcaat aaaaaaagaa agtccataca aggaagatga
                                                                         120
acttagagag agctaccaga gcaggtaaat ttccagcatt cttccatcat tgttgagaga
                                                                         180
tgggtatcaa agccagtggt gttctgttct ccttggcagg tagatcccca aggtggggta
                                                                         240
gctcaatgca attagctggt aagatcaccg gactcactct tccagggatg actccgtgca
                                                                         300
cattaggaaa cctgacattg gtttgccttc caatgtcgct ctttgctgtg ggggcaatgc
                                                                         360
cctgggcaca catattatca gaac
                                                                         384
       1292
223
DNA
Homo sapiens
<400> 1292
atggctcaat gttaattttt taatatactt gcaaatacat tataataaaa taatacaacc
                                                                           60
aaatcaaaaa qcaqccactt aaaaactqaa attcacaaaa tqaqctqttc ttqqctacat
                                                                          120
acagaaggcc aacatttaaa ctgaatgata attaaacgtt tactaccata ggtaatattt
                                                                         180
acqcacttct qqqtccaata qaaqqtqttq aatcaatqtq atc
                                                                          223
       1293
541
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1293
tttagccgct caaagaaaat ttattggcac tcggtaaaga caatgccaca aaatgccatt
                                                                           60
gaaacagata tetgaaagea caaggtgetg atgtageeae tagatgaate tgtteggtag
                                                                         120
cagttgagcc cggtgaatta aggagtttac agctgttatt tatgtggctc atgatgctta
                                                                         180
ttgagcaatc tgcaaaaata gatttcctgt ctcacacagg acagggtaga tttccagcaa
                                                                         240
gcataatcaa aatctccaag tcttttggtc aaattagagc tgccaccatg cacgaggttt
                                                                         300
tacttaaagg tgtttactga tgaataaact cacacttctg tgaactggtt cttgcttctt
                                                                         360
gtgcagctaa ctctttccac ctctctttgt tctgctgaat gatgtccacc aggttgttct
                                                                         420
tgaaactett caggtecact getgeaaggg agtagtetgg ggaataggna ceateactea
                                                                         480
tqqaqqcctt tqtatttqat cqtctaaqtq catcaqccat qtqqtacccc acaatqtqqq
                                                                         540
                                                                         541
       1294
445
DNA
Homo sapiens
<\!400\!> 1294 tttcaatgca tgaatatttg attttatttc aaaagacaat tatttataac actgaccctc
                                                                           60
tatcaaaaaq aatatgcttt tctgatgggq aagtgacaaa aaaaaaaaac tacacaqaac
                                                                         120
aagagtaata aagtteteaa gtaaggattg cacteeaata ggaattgagt gattetetea
                                                                         180
gagagcactc attacatctt agacaacgtc actcttcttt cctcttggcc atatgttcag
                                                                         240
gtctcatagt ctttctgaac acagaatggc agtggccagc attgtccatt atctatgttc
                                                                         300
cgcttgttta ctaattaaaa agctttggtc ttcagtgttg taaacgcaat ttctgccttc
                                                                         360
gatatcaaaa ggtgagtgaa tgagacaaga ttagttgaag gaagtacttg atattttact
                                                                         420
ccagatagct gaatgaaaat gggta
                                                                         445
```

<213> Homo sapiens	
400 1295	60
titititititititagaggttt ccaacacact ttattttgca gaccactggt ttgtagcttt	60
tgaggaccaa catctctatc aattcctata aaatgtccaa tcactttcag ttccgtagca	120
ggctcttcca tactgcacac catgcttatg gctggaggtc cagttacaca tgcatgaagg	180
ctgccctgcc cactggttcc tggaggaggg cgcgtccgag ttaaagcctc ttccaggagc	240
ttgaacttcc caggggtcat ttcctttggc aagaagtcag tttacatgtg cagctttggt	300
gcctgtgagc agaaagcacc agaaatgggc aggatgtgct gctttttctc tcacgaagat	360
gggcacttga ggatccagcg cccttgtgct taatgacagg aatccctcct cattgcttag	420
taggttaaaa tataaggaag cctcc	445
<210> 1296 <211> 442 <212> DNA <213> Homo sapiens	
<400> 1296 geggeegete cacatgeaca gaatetaeta ggatttgtea eggeegggtg geacegattt	60
gttttgacta tacaacaaac tttttttca aaagtatttg ttcagataac ttaaaaaataa	120
tataaaaata aacaatgaat ttgacttttc ctcaaaataa aaaaaaaaag gatggaaagt	180
ctaaacaata gcatattttt gaagtacaaa tgaaatgtaa agacactggt tcagcttaac	240
gaaacagatc aaagagacaa gttcttggct aatgctcttc ccagtatcac aacaccaggc	300
cgtgatcaaa aaccaataca gacaagaaag aagaaaaagg aaaaggtggg aaaagcaatg	360
tacaaaattt caaagataaa tacaatattt ataattgata tgttacaaaa taaagtccct	420
tagcaactgc aagtgttcat gg	442
<210> 1297 <211> 385 <212> DNA <213> Homo sapiens <400> 1297	
tttttttaa attaaatcat ctctcttata tatgcatcca tcttttgttg aatacaagag	60
gctcctttta aatatataca ttcagtactt ctacatttat gtattcattt aatctctgta	120
ctgtagtaaa atatgcattg ttttaattca taaggatttc ctggcaacaa tcaggttgat	180
actcactgcg tttgctgatt aagagcttag tgagccactc cagggaccaa ttctcccttc	240
tggatgcgga gaagcccatg agctatttta ggactataat gagactctac tgtgaaagca	300
aaatctgtct aatcttattc ttatcactta catttgtgta atctgtctat ttaagctacc	360
tttgggagta ggggtaaaat gttac	385
<210> 1298 <211> 501 <212> DNA <213> Homo sapiens	
<400> 1298 tcatcctcag tgcaaactcg ctggcacaga gatgttcaat gatggcctca gatttcaact	60
cgttgtcaca gggaggacac accgttgtgc cttggggctt ggaggcttcg gtggcattgg	120
gcggcgtcat ggcgatgcag acgtccccct cgggagactt gtcacactta agcatctcgg	180
gccagtagaa gccgaagaac tgcatgaccg gctcgcacga gtcgcgcacg gcctcgcaga	240
ccagcgacac gggtagatgg gccggtccag gcagacgggc gcgaagagcg agcagaggaa	300
gacctgggtg ccggcgtggc agttcttgtt gagcaggggc acccagctgc tggcctgctg	360
cttcacctcc gccatggtct cgtgctccag caggttgggc agcaccatct tcttgtagcc	420
cacgttgtgg cacageegea ggteegeggg gatgtteaeg eactgaggtg gettggtgta	480
gaagcgcccg ctctggtacg g	501
<210> 1299 <211> 566 <212> DNA <213> Homo sapiens <400> 1299	

tttgtttaaa tgaaaaaaag aaaactgaat atctccatta agaaggcaaa aaagtgccag	60
gcacgttagc acacacctgt ggttccagct actcaggaag ctgaggcagg aggattgctt	120
gagcccagga gtttgagacc agcctgggca acatagtgaa accctgtctc taagggtgaa	180
aagaaagaaa gaaagaaggc aaaatattag cacagattca ttgtagagaa aatgttatgt	240
atcctcacag actggagcca catacaaaga gataagtagc cttctttccc atgcttccag	300
ataaccagga tgcatctaag gtaagaggtt ggaggaaaga agacacattg ctctgattcc	360
aagggtagag ggaataatga ccagatttca accctaagat agaacccaaa tacttgggag	420
gcttgtggtt ctttcttctt aatggttgat aacacagtgt ccctacagag aggtcatctg	480
aaactcagag gcaaataact catcaggggc agcaacactg gcaacctaac ttagaagccc	540
cgtgtggccc ctttttatt tggagt	566
<210> 1300 <211> 392	
<pre>&lt;211&gt; 392 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	
-400× 1300	
tititititi ttaatcttgc cttttttta ttcaaaagga tcacaagctt cacatcaatt	60
tggcttcaaa aagacctcat gtcttaaaac taagtaccgt gacatttatt ttgccatctg	120
tgacagtttc acgtcgaaaa agcctcaaca taaaaaaatt accttcaaaa cccactgaga	180
catteteaca taaactagga taetgeacaa acaataaagt tetttettea atagteaate	240
ttttcaattt catccatgtc ttcagcgttg agttgcttaa tactgctgtt aaagtggtcc	300
tggattttca tgagcgaggg cagctcatct acttcaatca tgttgaaggc aaggctcttt	360
ttcccaaagc gccccgtccg ccctatgcgg tg	392
<210> 1301 <211> 318 <212> DNA	
<212> DNA <213> Homo sapiens	
<400> 1301	60
tttttctga aatcattctt ttattttgca cacacatagc tgctatttac tgaacactgg	60
aaattcatga atgcgttaca tatttaaact ttcatagaag gctcagatca acaaagcaaa	120
acttctacag ataataagta gttgtgtatg cttgtcactc ttgggcccat cagcacctgt	180
tccctatcat attgctgaac tctgcaaact ccagaaagga aggtttcttt tccaaacttc	240
agagaagctg cagatcaaga atttgggccg ttgcatctga ttagaaactc tcttcttcca	300
gtgtgagaac gttggatt	318
<210> 1 <u>3</u> 02	
<211> 451	
<212> DNA <213> Homo sapiens	
<400> 1302 tgaatgatgt gcaacattta atagtcacaa agcatttgct ttcagtacag ataatgaaat	60
acagtagtgt gaggtttggt tgttttttaa caatgaattg tgctgggcat ttatgtatag	120
agggettatt attitettet gtattietea tatteaeagt tgttaataag tittetgagg	180
tgtcccaaag atgcaaaagc agaaattttt gaacacgtat tttgagaatt tctgaaactc	240
acataggtac attccacagg gaatatacag aaattttgct tgattgagta tagagttggt	300
aaaaatttct accacaatta ggtttacaca ggaaaatgta aaaaattact attttaaaag	360
gtaacacagt attaatgaag atgtataact atagattgtt tctagcttca gaagaggtcc	420
tttcaatctg tattaaaatg ttgtgttttc t	451
titicaatity tattaaaaty tigigettie t	101
<210> 1303 <211> 389	
<212> DNA .	
<400> 1303 tttgatttac aatgaagaaa tttattagtt cacagttctg gacgctggga atttcaatat	60
ggaggtgcca acatgtgttg agaggcttct tgccgtcttc ttcaaatcat ggaaaaggtt	120
ccccaaattc tctctccttt ctgaagcgtc tcttcgaaga taaccctttc taaacatctc	180

ccttgagtac acataaaagt ttactccaaa tttgtgaaat gtactggcct tcagtcaatg ctgattaatt ttaggtagaa tagaaatgtc aggcacagtg ctgtgattga ttgggtgtcg attctctgct atgaagcgaa ggggtgtgct catccctctg gtgactagct ctctgcttt	g agcacctttg	240 300 360 389
<210> 1304 <211> 292 <212> DNA <213> Homo sapiens		
<400> 1304 ttttttttta ggataacacc atttaatgaa caatactgga taacattaa	g tactattatc	60
actttaaaat tcaaacaatc ttccaaacat caatacatac		120
gacaaatcgg acttgagggt aaaagtgaaa tcctcacctc ttgcccatg		180
gatggaattc agcaaagctc tcccactgca gattgggaga atcaggtat		240
ggggggctgc cagggaagga ggaccctata gggtggccag caaggggcc	a ct	292
<210> 1305 <211> 335 <212> DNA <213> Homo sapiens		
<pre>&lt;400&gt; 1305 tttaggagta cacaatataa atgctttatt gctagcacag aggtttctt</pre>	t ttaagtaaat	60
taaaagaaat aaatcttcat tttcacattt tttgttgcag tccaaaggt		120
tagtggctat gtccacttgg acacatgcta caggagggca gcattcaca		180
agaaatacgg catctgtcag ggctcacggc actgggctgc tgaatgcac		240
aataacagca agtggagact ttaaaaacatc atggatagat aagagttat		300
tggtacggtt aagaagcaga agatcgttaa ataca		335
<210> 1306 <211> 408 <212> DNA <213> Homo sapiens		
<400> 1306 aaagtttacc ataattttat tgtaatatca gaatcacata agatataga	g ttaagcagaa	60
aactgatgaa ttttcttcag atgatcttta agaatctcaa aagccttga	a gtttgctatc	120
ttctactgtc ttattagaag gataaaaaac tttgaatgaa aatccactt	c ttggaaaaga	180
gccagggttt atgcagaggc attcggtatt tgtcgtagtg aaaggatca	t atttgtctgc	240
aatgacaagt agatcgggca caggatacac tctcaaagca tagtcatat	g cccaatacac	300
tgggcagaca taaagaggta ggggagtcag atgtccttgg gataagata	g tctttacaaa	360
gtgattagga atagccaaat tgctgctagg aaaacggacg cagtttct		408
<210> 1307 <211> 406 <212> DNA <213> Homo sapiens		
<400> 1307 aatctgaagc ccctgatttt atttttccag catcactcta aggaagagt	g tggattagtg	60
ccattattca gggctggtat taataaaagt tagcttttat ctgcagggc	t aggttaaggc	120
tggcattctt acttttacat taaaaaaact ggctacaggc tgcgcactg	g aggtacttca	180
gtcatgtgcc ttctctaaag gattcttaga tccttaaaat atatagtat	g ttttaagttt	240
gtatctaaat agcacttact gtaatgtatt atacctaaat gtttattaa	a agttagaaga	300
aatgagtacc aacaggccgg aatggaagtg aggagagggg ctaagacat	t gctgatctga	360
gggacagacc tctatgcaat agaagagggc tgggagaagg ggtgat		406
<210> 1308 <211> 455 <212> DNA <213> Homo sapiens <400> 1308		
tttgccacag ggtaaacttt tattttagaa tccaatcttt tccccacac	a tacacaataa	60

attaaacaga atccacagta aatgtacatt ttttaacata aaaagtcagt tactgttact tcatgatcac atgaggatcg tcacagctcc gtgtccatta gcacattacc ctccttgtcc	120 180
ttaactctta tccgaccgga tctgtacttc gtttcttgat gaccgtttgc atatacggtt	240
ttaacagtgc catctgggta ttcccgtctc ttgaactggg cagtatgtag ttctctttgg	300
ccattattaa actctatgag tttgttgcca tcacgttgta ctctgacaat tgtaccatct	360
	420
gggaaaatgc tttcttcttg tccatcagga aataagtttt taacagtctg gtcagggaac	455
gtgaatttet ttetteeate tgggtaatgt tttte	433
<210> 1309 <211> 419 <212> DNA <213> Homo sapiens	
<400> 1309 tttacaaatt taatctgtat taactttatt taaataaatg accaatctgt cacccaacat	60
gtcatgtggc ttctctgcac tgatcttgct ttgttttcaa acttgtcact tgcaaatatt	120
ataagaaaaa aaggtcatct aaaatgagtt aaactggtta caattggtct caacttttaa	180
gaatttacat tcaaatggaa taggacgcag tgtttttaaa gtgcaagata tactcttttg	240
gctcaacatg aaacattata gaactggaaa ttaccgcagt catttctcct acaacaaact	300
tagttaaaag ctgttttgaa agttagttag ccatcagatt ataaactatg aaaaacactg	360
aaaagtcatt taaaatgagt atataaatgc aaattacaaa taaaaccagt gtgggagag	419
<210> 1310 <211> 265 <212> DNA <213> Homo sapiens	
<400> 1310 tttgtagaga gaaaaattta ttgcaaggca gccaagcaag gacacaggag tctggcccaa	60
atctgtctct ccaagttgga ggctggggca gattttatat acagagggta gtgaggcatg	120
atatgattgg atcttgtaat gaggggattc aggaggcttg atctgactgg atcacgccag	180
ggctcaatct gattggatca aggatcatgc cacgtggtgt ccacttctta actcagtccc	240
tgttcctcag tctgagcact taggt	265
<210> 1311 <211> 352 <212> DNA <213> Homo sapiens	
<400> 1311 tgatattaca agttetttaa tgaataeett ggtaaettge tgacaaetta aaagataata	60
ccactgatat tcaaatacag tttataatca agtccagtgg cagatactga accgcccacc	120
tccacctcaa tttgtgaaaa cctgtctttt gtagggttgg ctaccatggg taattacgca	180
gcactgaata aaaaatagaa tatttttcta atacttctac aaatataata aacacagtaa	240
cagtttgctg cagcgatttt ctttacaaag aatatttggg cccagtgcta cagaaaaaca	300
tgaactacat cttatcgtca caaaatagcc attataaaat gaattttgca gc	352
<210> 1312 <211> 425 <212> DNA <213> Homo sapiens	
<400> 1312 tgaagagcac agatttattg aaacaaaagt acatcccaca gagtggcagc aagattgagc	60
aacctgctgg agaccaccgg ttacagaatt ttctggggtt taaataccct ctagaggttt	120
cccattggtt actcggttta cgccctatgt aaatgaagta gtgatccgtg accagtctgg	180
ctggtcgtgg gaggggacca gtcataggta cttttcattt ttcatctgcc aggcagaaaa	240
ggggcaggtt gcaaagggag tataacctct gattcttttg ttacttgggc gaggaaagtt	300
gagattttcc tttagattta gttataggaa gtcagtgtga attggcttta ggcagtgtga	360
actgcctctg gaacttattc tcctgcctca caagcattta tgaaatctgg ccctagacaa	420
gatgt	425

<210> 1313 <211> 443	
<210> 1313 <211> 443 <212> DNA <213> Homo sapiens	
c4005 1313	60
cggccgcgga ggacctgtcg gacgcgctgt gcgagtttga cgcggtgctg gccgacttcg	
cgtcgccctt ccacgagcgc cacttccact acgaggagca cctggagcgc atgaagcggc	120
gcacagegea gtgtcagega caegagegge ttcagegaet eggagagtge agattcaett	180
tataggaaca gcttcagctt cagtgatgaa aaactgaatt ctccaacaga ctctacccca	240
gctcttctct ctgccactgt cactcctcag aaagctaaat taggagacac aaaagagcta	300
gaagcettea ttgetgatet tgacaaaact ttagcaagta tgtgaaacaa gaagttetgg	360
gtcctttcat cataagggag aagcttcaga aagttccgag gacctgctaa aatcagctac	420
tagaatctgc tgccagaggg gac	443
<210> 1314 <211> 116	
<212> DNA .	
<pre>&lt;400&gt; 1314 tgaggccaca catgtttatt aggccggtcc tgacacctgc ctgcggggaa ggaccaccga</pre>	60
gaccagatcc tgggtgccat ggggtgcagg gacagaccgg tgcatggcag cggctg	116
<210> 1315 <211> 164	
<212> DNA <213> Homo sapiens	
-400 1315	<b>C</b> 0
cagagaaata agcttttaat ggcgcaatgt tgcatatacg ggtaacttgt tctttgagaa	60
atataaactc aaactcacaa gttgtcatga taacatatgc agtaatatga ccattctaca	120
acagagtcac ccacaggtaa aacacatgac tgggctttga gctc	164
<210> 1316 <211> 386 <212> DNA <213> Homo sapiens	
<210> 1316 <211> 386 <212> DNA <213> Homo sapiens	60
<210> 1316 <211> 386 <212> DNA <213> Homo sapiens <400> 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta	60 120
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg</pre>	
<210> 1316 <211> 386 <212> DNA <213> Homo sapiens  <400> 1316 tttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt	120
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg</pre>	120 180
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc</pre>	120 180 240
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;211&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtettget ctateaccca ggetggagtg cagtggcaca teteggetta ctgcaatete caceteccga gttcaagcaa tteteetgee teageeteee gagtagetgg gattacagge atgcaccata acacecaact aatttttgta tatttagtag agacagggtt tcateatgtt ggecaggetg gteetgaact cetgacetea agtgatecat ceacteagge cteccaaagt geegggatta caggeatgag ceacegeacg tggeetagat gaaagttttt</pre>	120 180 240 300
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aattttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga</pre>	120 180 240 300 360
<pre>&lt;210&gt; 1316 &lt;211&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggtaa agcagccaaa aagctgtcac agcatttttg agatga</pre> <pre>&lt;210&gt; 1317</pre> <pre>&lt;211&gt; 513</pre>	120 180 240 300 360
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;211&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aattttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga</pre>	120 180 240 300 360
<pre>&lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens </pre> <pre>&lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga </pre> <pre>&lt;210&gt; 1317 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	120 180 240 300 360 386
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1317 ttttttacat tttattagaa tctttttatt ttttctgca gaaaacattt gagatgcca </pre>	120 180 240 300 360 386
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcce gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1317 ttttttacat tttattagaa tctttttatt ttttctgca gaaaacattt gagatgctca tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagttt tttcagctac tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagttt tttcagctac  tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagttt tttcagctac </pre>	120 180 240 300 360 386
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1317 ttttttacat tttattagaa tcttttatt ttttctgca gaaaacatt gagatgctca tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagtt tttcagctac atttgatac ggccataaat ttggatggtc catgttacaa tccttccaca attctccact atttgatac ggccataaat ttggatggtc catgttacaa tccttccaca attctccact </pre>	120 180 240 300 360 386 60 120 180
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgcaccata acacccaact aattttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagttttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1317 ttttttacat tttattagaa tcttttatt ttttctgca gaaaacattt gagatgctca tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagttt ttcagctac catttgatac ggccataaat ttggatggtc catgttacaa tccttccaca attctccact taaagacatc attttctat gttttaatg actattgcca tctaacaatt ctacaattcg </pre>	120 180 240 300 360 386 60 120 180 240
<pre> &lt;210 &gt; 1316 &lt;211 &gt; 386 &lt;212 &gt; DNA &lt;213 &gt; Homo sapiens  </pre> <pre> &lt;400 &gt; 1316 tttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctccc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210 &gt; 1317 &lt;211 &gt; 513 &lt;212 &gt; DNA &lt;213 &gt; Homo sapiens </pre> <a href="#"> <a h<="" td=""><td>120 180 240 300 360 386 60 120 180 240 300</td></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>	120 180 240 300 360 386 60 120 180 240 300
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;2113&gt; Homo sapiens  <pre> &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggtaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1317 tttttacat tttattagaa tcttttatt ttttctgca gaaaacattt gagatgctca tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagtt ttcagctac catttgatac ggccataaat ttggatggtc catgttacaa tcctccaca atcactcact taaagacatc attttctat gttttaatg actattgca tctaacaatt ctacaattcg cctctttgcc tgtaaaaaagg ccaactctac gtccacctg gtctcatatt gctatcttt attatctct gcttaagatt gcaaaagttt ttgatttat tattcacctg aacaatgtat </pre></pre>	120 180 240 300 360 386 60 120 180 240 300 360
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctcctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aattttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggttaa agcagccaaa aagctgtcac agcatttttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;212&gt; DNA &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1317 ttttttacat tttattagaa tcttttatt ttttctgca gaaaacatt gagatgccat tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagtt tttcagctac catttgatac ggccataaat ttggatggtc catgttacaa tcctccacc atctccact taaagacatc attttctat gttttaatg actattgcca tctaacaatt ctaccact taaagacatc tggaaaaagg ccaacctcac gtccacctgt gtctcatatt gctatcttt atttatctct gcttaagatt gcaaaagttt ttgatttat tattcacctg aacaatgtat tgcaattcca atacacccc atctctgct gttatcaca gcttgtgaca aaatagacca aacaatgacatc atttgatacca atcacccc atctctgct gttatcaca gcttgtgaca aaaatgaacac aacaatgacatc atttatctct gcttaagatt gcaaaagttt ttgatttat tattcacctg aacaatgtat tgcaattcca atacacccc atctctgct gttatcaca gcttgtgaca aaaatgaacac aacaccacaccacaccaccaccaccaccaccacc</pre>	120 180 240 300 360 386 60 120 180 240 300 360 420
<pre> &lt;210&gt; 1316 &lt;211&gt; 386 &lt;212&gt; DNA &lt;2113&gt; Homo sapiens  <pre> &lt;400&gt; 1316 ttttttgaga cagtcttgct ctatcaccca ggctggagtg cagtggcaca tctcggctta ctgcaatctc cacctcccga gttcaagcaa ttctctgcc tcagcctcc gagtagctgg gattacaggc atgcaccata acacccaact aatttttgta tatttagtag agacagggtt tcatcatgtt ggccaggctg gtcctgaact cctgacctca agtgatccat ccactcaggc ctcccaaagt gccgggatta caggcatgag ccaccgcacg tggcctagat gaaagtttt aaaagcctgg gctaataaaa tcatccacca atcattttc ttatggtaa agcagccaaa aagctgtcac agcattttg agatga  &lt;210&gt; 1317 &lt;211&gt; 513 &lt;211&gt; 513 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;400&gt; 1317 tttttacat tttattagaa tcttttatt ttttctgca gaaaacattt gagatgctca tttgatataa acatctaatt ccaagagaga ccagtgctca aatatagtt ttcagctac catttgatac ggccataaat ttggatggtc catgttacaa tcctccaca atcactcact taaagacatc attttctat gttttaatg actattgca tctaacaatt ctacaattcg cctctttgcc tgtaaaaaagg ccaactctac gtccacctg gtctcatatt gctatcttt attatctct gcttaagatt gcaaaagttt ttgatttat tattcacctg aacaatgtat </pre></pre>	120 180 240 300 360 386 60 120 180 240 300 360

<210> 1318

<210> 1323

<211> 166 <212> DNA <213> Homo sapiens	
<400> 1318 ttttggtagc tattgaatca gggccacaca tttaattgat attatgatca agatgttcaa	60
ggcaaaaaat actattactt atttaatgtg gaacaagtct agtctttctc ttgagctccc	120
acctgctggt taggaggcaa caatgttatt tggatcctgt ttagag	166
<210> 1319 <211> 497 <212> DNA <213> Homo sapiens	
<400> 1319 aattttaatt tacaatgaaa tgaaatgtga cacatgaagc ataagaacac aactgaagac	60
tgcaaacaac ctaaatcaat taccgagttt gctcaagcct ccaagcacca gtcaaatatc	120
gaagtcgtat aaaaagtagg actttacaca tttgtagcca gctccagaat ggaactaatt	180
tagaaccttc aaattctgtc cagttgacag caatttctgc tattggaatt ttaaagaact	240
gtgctatgta cagtagttct acatcaaatg ccctgagcaa ttgattcttt ttctaaatga	300
gctcgagatc cacatgctat agccaattga ttaggccaag gctgtagatc atttagcccc	360
ttttctaatt tctcaacatc tggaaacttt gtggctccat cagcatctgc cataaggatc	420
ttttctcctc gagaactgaa tatacccatt ctaatcgctc caccttttcc acgattcttc	480
accagggtta tcacacg	497
<210> 1320 <211> 233 <212> DNA <213> Homo sapiens <400> 1320	
gaggtgaagt tettgtttat tgttgcagea actettatae agacattage gttcagttaa	60
ataaaggaag atagatagca cagtaaatac atcacaaccc caaactggat gatgtsgcca	120
cgggacggag gavsghasgs agggagggac cagtsaccga ctgtcaagga agtacattca	180
gtgggtgtgc sggtgtccac attccaggct cacgtgtaga tattccccbc cat	233
<pre> &lt;210&gt; 1321 &lt;211&gt; 231 &lt;212&gt; DNA &lt;213&gt; Homo sapiens  &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c </pre>	
<400> 1321	60
taattttcca caaagagete cagaaggeaa atagtttate actteeceae tetgaaatag	60 120
cacgcaagac agatgatgca ggggaatggg tgtccactct tncttgtnct cagagctcct gcagcagggc tgantgaccc gcaagcgggg cccatgcagc gtgtcctctg caaagtgcag	180
gtnttcagtc cacacacage accaccagea etgetgatgt caeggttgtc t	231
generoagie cacacacage accaccagea engergange cacggregee e	231
<pre>&lt;210&gt; 1322 &lt;211&gt; 272 &lt;211&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<400> 1322	
catgttttta tatttttata tatttttttg aaaaattaca ttaacagcat aaaattcaaa	60
agttatacag aagaaacaat aagangtaaa tetttegtee tgteetgtge eccatetagt	120
accttaagac aatcagtgat agtagtttct tggctgtacc ttcacaaata ttctaggtat	180
ttatattatt tatttncccg tacacaacaa cagcgtatta tagacaacat tctctcctgg	240 272
cttttttcac ttactcttta tccatattga ta	414

```
268
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1323 aataaaactg tttatttatg gnacacatta gaaaagaaag gttcgaaaac nncacaaaaa
                                                                                60
caacgggatg catttaaaat cggtatgcag aggcatctaa aggattatac aaatctaaaa
                                                                              120
                                                                               180
ttgcctaaaa gattctttac aaaacgcaaa tgaaaggctc atgcagcaca tgancctggn
ttgcccctnc tctgtctctc ctttgcctcg atgctttgag tacagtaacc cttttnctca
                                                                              240
                                                                              268
gttacctttn ctccttgagg ctaatgaa
<210><211><211><212><213>
        1324
442
DNA
Homo sapiens
<220><221><223>
        misc feature
n=a,t,g or c
<400> 1324 ctttaattaa aggctaatgc ttagcacttc attagnaggt ggagagatta aaaactaact
                                                                                60
                                                                               120
teettgeega atageetggg titggaaaag catgtttttg aaatatgtgg gateteeact
                                                                               180
ctggggccct ctgcagtcct gtctgggtct tcacacctaa gtcaaagcaa gagctatttt
                                                                               240
tgcgttagaa tttccttagc caagactaca agaggccaaa tgccagggtt catctcagct
                                                                               300
tectgtgeat teacatggaa ggtegtettt gaatetgeae gtecageteg eeatacacat
                                                                               360
gtctcaggga gtcactgctc atgctgggct atcagcttcc gatgcccaga gacccagggg
ccggcacact tcttcccact tgcacggtgg gagttggggc cnggattttc acgggaacat
                                                                               420
                                                                               442
cttctttcat ttgggncttt gt
        1325
470
DNA
Homo sapiens
<210><211><211><212><213>
        misc feature
n=a,t,g or c
<400> 1325 ctgggaatat ttatttattt atttggncta ttaacaccaa ganctgcaaa aaacaacctc
                                                                                60
taaacacaag ataagaaaac tcgaacatta acattctnca attttgtgta agcnctgcag
                                                                               120
tacgganaat atacaaactt naaacagctg caaaaatagt gtctntggga gaanatagag
                                                                               180
tctctacatc gatacaagaa aaatagggca tttttctaat ccatccagcc ctggggcggg
                                                                               240
ncggagengt ntagagtege catttgeeae etggggggga ttgeeagete teeteeeae
                                                                               300
tacceacetg ggggetggge gggetggget getaettaag gacaatettt aggteagggg
                                                                               360
tgaaagcgag atgaaaatgg ccacttgggg aaaacacttg tttcctcccn ctgccagcag
                                                                               420
ctggattggg ncaaggtgtt atgggccctt aggggncttt ttgggtcagt
                                                                               470
<210><211><211><212><213>
        1326
391
DNA
        Homo sapiens
        misc feature n=a,t,g or c
<400> 1326
ggcttaggaa aaacatgtac tttattggca aattgtttta gctgtagacg gatggatgat
                                                                                60
tctacagcca cactecectt teegggtgta cateegggge etgtgeacet gegeggaate
                                                                               120
aggeaacttt gttttteeeg gteeccaaaa ageteaeett tgacacacee tetatatgea
                                                                               180
caggaaaact getettetta tteagggtet etttttgtgg tggaatteag agaaactggg
                                                                               240
```

```
300
ttgcaacatc tttttaggga gaggtcgagt atgttttttc attcgagtga ctctgcatgc
ttaagggaat ctgagtcggt ataaaggggc tagaccnctg aatttggcgt acagcgttcc
                                                                          360
                                                                          391
engggtngee egeageeeca gggtacaact g
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1327 cgcatatcca gtgtaaattt attttttac agcatccaat aaatcccagt aaaggagcta
                                                                           60
aatgaagatc ttaacatgaa aagtggtgtc agagctcttt aggcaatgct gaaatgcact
                                                                          120
tgattttatg cccgtgggtg gtcggcagca agttttattt gcaaagcagc attagcaaac
                                                                          180
                                                                          240
aqaaqcaatt qcaccqtaaa tgagtaacct ctaaagtatc agtaattata tttaatgaaa
tgtccctcaa agtccctttg ttatttgcaa gtgacacatt gtaaggaact tgcccatccc
                                                                          300
gctaagetga etteteagee getteagtet eetgeteegg acagettete ttetggaeag
                                                                          360
aactggacat ccagggggga tacggagccc cttgantgcc ctgccttggg ccaaggttgt
                                                                          420
                                                                          471
aagngggtta aggacngggg ggaaaaantt ccccccnggg aactggagtc t
       1328
446
DNA
       Homo sapiens
<400> 1328 gacaggttct ttctctgtca ctcaggctgg agtgtagtgg cacagtcaca gctcactgca
                                                                           60
geettaeett etgggeteaa gtgateette caeeteagee teetgagtag etgggaetae
                                                                          120
aggtatgtgt cactacaact gactaatttt taatttttt atagagacac aggatctcac
                                                                          180
                                                                          240
tatattacce aggetggtet tgaacteetg ageteaageg geecacecae etcageetee
ctaagtgttg ggattacagg catgagccac ggtgcctggc tatcacgcaa ttcttaagtg
                                                                          300
cttattccag tagcagaaga gattagaaag gctggctttt tccaacagtg ggagcttgaa
                                                                          360
tctggaaagt cttaaagttg ttgtaatttc acactactaa gaagcacttt gctcatgcaa
                                                                          420
ctgaaaaaaa aattaagtgc ctaccg
                                                                          446
       1329
432
DNA
Homo sapiens
<400> 1329 caaacaattg atttttattg cagtaagagt aacaaggaat cccacccctc acatgccctt
                                                                           60
tgctttatgt aaaaacctgt ccagcagaat aagcaacagt caccctcagg aggcgattta
                                                                          120
gccccaagtg cccatagaac agcctcaggc acgacttctg tgctccctcg ctgttcccag
                                                                          180
agccatctgc caagaccagg aattcacctt tggagtctaa cttgttttct cttttttca
                                                                          240
cctctcaaaa aataaaaagc cttcagtaat acagcccaag gattacccgt gtgtctaaaa
                                                                          300
gaaggataga ttcccataaa caatgttgtc agcttgagtg agggtaaaca cagaaaggca
                                                                          360
                                                                          420
cacaataaat taaagcagac cttgactctt cagagggcct ggcggtgacg tctggggggg
gccagatctg cc
                                                                          432
       1330
440
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1330
agactgcata gggctcggcg gggaggtggg ccccagcagc tgctaagaga gtgaaggagc
```

```
tggaccaagc cccgggggag gaaggcatca cggcaaggga agggtcgcag tcacaaccac
                                                                           120
acctcgagag ggagacctgt ggccaaagcc ggggggnaca cactacagct gttcccgtgc
                                                                           180
ccactttggt cctgagagac tcagggccag gggtccagaa cagttcagca taggaatggg
                                                                           240
gcggggaagg cagagagga gaaggggctg gctccgacca agaagcagaa ncatggggat
                                                                           300
                                                                           360
agetttgaat ettgeettea cacceteegg eetaacteta tggageeaca gtteeaattg
cttccaaccc cttggggaaa cccccccggc cccggccttc ctttggggac aacagagggc
                                                                           420
                                                                           440
attaaaggga ttgggcttac
<210><211><212><213>
       1331
471
       ĎNĀ
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1331
aactactaca tttaatagcc ttcttctcta acacagtaat ttttatttaa aaaggagact
                                                                            60
aaacagaagt caggggtagg tggttctcca tgactgcaaa taataataat aatgatgatt
                                                                           120
ttttttaatg tacagctctc acacaaattt cattttgtga acacactggt aagtacacga
                                                                           180
tgctggggct tccaaaatgt ggcgtatccc actgatggct ccaacttgcg agtgggctca
                                                                           240
                                                                           300
qttatqaaaa actcgggaga ggacgggttg tcgctgctcg agccgttttc tcggaagccg
ctgctcacca acttctcgta tttctccttg gtacgcgtcc ctctccgcgc accagcctgg
                                                                           360
                                                                           420
agatetectq ettqaqqtqq tegaettnge tgeageaget gggttettet eegaeteeag
                                                                           471
gacgtgtctc tggctgcacc ctcttgaagc ggcaggactg ggnatagccg n
       1332
418
DNA
Homo sapiens
<210><211><211><212><213>
       misc feature
n=a,t,g or c
<400> 1332 gtagaaggaa agcattttat tgcaaataac taatagttac aaaagcactt tttaaatgtt
                                                                            60
                                                                           120
attattaqat gttaagccga aaatctagaa actaacattt acccaggtta caaaataaga
                                                                           180
qcttcacatt tttcaaagtc tctaagggta aggtacatcc ccagataaaa tgagtatagg
ccagtctcct ttggntttgg gggatccttn ccaaanattt tccagactat ttagctttcc
                                                                           240
                                                                           300
ttgtgtagtt acagctcaaa ttagaaactg aagaaacagc aagtggccag gcagggtaga
aagcaaataa actgagctac ctgtgccttt ttccaaattc agtatatgtg cttggctcct
                                                                           360
                                                                           418
qaaaaaaaaa attctqatat tgtaggcatt ccgattactt ngtgagatat tagtgaag
        Homo sapiens
       misc feature n=a,t,g or c
^{<400>} ^{1333}_{\rm tttttttt}ggcaggcatg gttcaggctt tactgggcat cacacggagc tggggtaggg
                                                                            60
acccagcaaa gggagcaggg catacagatg gtctttgagg acagtgctag ggagctcaga
                                                                           120
gatcagtctg gcttctcaaa gaagagaaaa gcactgacag gaaaagcagt caggttggcg
                                                                           180
                                                                           240
ttagtgcagg gaaagggaag acgttaggag ggggactttg atgggaggga cagtggggga
                                                                           300
qctqaaqctt ttaaagagcc tcgatgccgg gggagggatg atnttagaag gaaagggaag
                                                                           360
cccaatgagg cctttgggga agagaagaga ntagaaagaa gggaaaaagg aagaaggcca
                                                                           383
gtcccaggga ttcaggcttt tcc
```

<210> 1338

<210> 1334 <211> 260 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 1334 acttttcata aatttattta tgaaattaaa tgtggtttct ggcttggaga aggaatagtg caagagtgac tgtccatgct gctgaatcct gtgggctcca cgccagctcg ccaggccctg gntctgctcc tggngcccct tggcaggaca gggcgccatn tncacacacc cgctgcctgg gntgtgggtc antcctgtnt gctgagccac agaattcggt ctntctctta tggcttctca cgttcacgag cgtaaggcaa</pre>	60 120 180 240 260
<pre>&lt;210&gt; 1335 &lt;211&gt; 277 &lt;212&gt; DNA &lt;213&gt; Homo sapiens &lt;220&gt; &lt;221&gt; misc feature &lt;223&gt; n=a,t,g or c</pre>	
<pre>&lt;400&gt; 1335 tttttctca gtttctcctt tattgctccc gtacgaaccc ctcccctccc</pre>	60 120 180 240 277
<210> 1336 <211> 309 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 1336 ttnggtatgt ggttcagctn tttattntct ccatggggtg ggtgaagagg agtggcccag ctgagctgag gaaggtgacc actgagaacc cattcaacct gctgagcagc ttgggcagaa aggagcagga cttgggacag acgactgaag atgcagagac cccatgggcc ccacccctgg gccttcctcc catntggctg caggcatcct ntntnatcan tgctgggttg cttcctggtt aaagggccan aaggtnaagg agatgggntt ttcangcatc agaatgaggt tnaatttggt gcccacatc</pre>	60 120 180 240 300 309
<210> 1337 <211> 405 <212> DNA <213> Homo sapiens <220> <221> misc feature <223> n=a,t,g or c	
<pre>&lt;400&gt; 1337 cagagncnag tttattgcac tgactcaaag cacaactaaa aattaaaacc agaaagaaaa ctgtacaaag cacgaagcta caactttaaa agcatcacct agacgcgggt ttaattgcac tacagnccat gggtgaggag agctttncat ccgtgagcgc cgggcaagga caacagacac agagagatgc agcccgcctg ggntcatctg ctgcaccaac ttttacaaaa ggttctagaa aagggaagtn tnaagtcaga tctgggattt cggcatcttg acctcatttg gacatggaaa acctccacct atgtggctgg ctgggtcctg tcagagaaca tattttatca ccctccacct gcggcctggg ggntccctga caccaaggac tnggcctggg caggg</pre>	60 120 180 240 300 360 405

```
493
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1338 tttccaagec aacatttatt nttgcacaag cetgttgcag teetgagggg atettetgge
                                                                             60
anaggtntgg gtaggagctg agtggccact ggggtgaagg gagacagagg aggctntgcc
                                                                            120
agcaggntcc tatccagatg atacatgaga tggaggctcc tcagccacac tccagggagg
                                                                            180
gtggggtggc aagggggatt cagggataat ggcattaata atacaagtgg taaacaaata
                                                                            240
                                                                            300
accaaqaqqn tctggctggt tacgntacac aaaanttagc agtaagagtc cgtgctttca
                                                                            360
cattcctatc agacagatct gagttcaaat cctgtatgtn tagcagggtg aggtatctgc
                                                                            420
tttctttcaq aqcccatqqq tgcacatctc tgagcctagt tacaacagtt ggcacatagg
                                                                            480
tnggtgacaa ggagggcagc tctttgattc ctgnttgctt ccacagcaca gagagttaag
                                                                            493
tatggctggt nta
       1339
326
DNA
       Homo sapiens
       misc feature
n=a,t,g or c
<400> 1339
gtggtcacag tggcaacggt tagattggtg ggcagggaga agttggaccc attagaggga
                                                                             60
                                                                            120
gagggtggca tgctggagcc catgctggtc acgatgctcc cgatgccaat ccagaaggcc
atgacgagcc cagccaacag gccacaacag caccaggagg gttagcacat ggaaagaaca
                                                                            180
ttccaaggca gaagagtccc agcagcggtc ccccaaccat gccaaagatg ctgattgctg
                                                                            240
cctgcaacna ggtcccatnt gggaggaaat ataggccatt cctagacaaa gcagcccata
                                                                            300
                                                                            326
gccaaaggaa aggncttctg ggaaag
       1340
424
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<\!\!400\!\!> 1340 agagetetag cacatttatt egggagagta ageetgggaa agaetaaggg agtggtggca
                                                                              60
                                                                            120
gggagaaagg ctgtggggaa tcagagcggg tgctcagttg ggtcttgaag ganannnnn
ngnnggtggg aggtgggttn ccgaggatat cttggttgaa gacttggggg tcaagacaaa
                                                                            180
                                                                            240
gggacttagg gggatggggt ctggttagag ttggggaggg ggcctaggac atccgtgcag
agtctgggga ggttggggtg ggagagtctg tacaagtttg gtgttgggtg ttctagttgg
                                                                            300
cctggtgtcc aagagttggg gcagtccgaa aaagggttcc agagtctggt gtggctggct
                                                                            360
ggggtttcac ggcanaaaat gggctggaag gggcagttgt aaactgtctg gttgcaaggn
                                                                            420
                                                                            424
aaag
       1341
429
DNA
Homo sapiens
       misc feature
n=a,t,g or c
<400> 1341 ttgacgttgg cagtgacatt tatttttctn nggggagggg agttatatac agcagtgacc
                                                                              60
cqqaqcccct cacccccacc aggcttaggt ggggacagga ggcgttggca gaaggcacac
                                                                            120
```

agtggcagta gccagaagag gccaggaagt aagggtgggt atgtgatgtg	180 240 300 360 420 429
<210> 1342 <211> 246 <212> DNA <213> Homo sapiens	
<220> <221> misc feature <223> n=a,t,g or c	
<400> 1342	60
gaaaatgett taataagtgt tgacaacact gttttgcann ntgtaaaggt actatacaaa	60 120
tncttaatac aaaaagaata aattaaaagc agatttcttt ttttaattct gcaactttgt	180
ctacaacgta catcttttc attgattaca gttgaacaga atccagtaaa atcattttac	
atgctctaca gtcagtttca ggggcancct aatctttttn cccccattat taaactagag	240
<pre> &lt;210&gt; 1343 &lt;211&gt; 852 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>	246
<400> 1343 cttgcagetg eccaceteae ceteagetet ggeetettae teaceeteta ecacagaeat	60
ggctcagtca ctggctctga gcctccttat cctggttctg gcctttggca tccccaggac	120
ccaaggcagt gatggaggg ctcaggactg ttgcctcaag tacagccaaa ggaagattcc	180
cgccaaggtt gtccgcagct accggaagca ggaaccaagc ttaggctgct ccatcccagc	240
tatcetgtte ttgeceegea agegetetea ggeagageta tgtgeagace caaaggaget	300
ctgggtgcag cagctgatgc agcatctgga caagacacca tccccacaga aaccagccca	360
gggctgcagg aaggacaggg gggcctccaa gactggcaag aaaggaaagg	420
ctgcaagagg actgagcggt cacagacccc taaagggcca tagcccagtg agcagcctgg	480
agccctggag accccaccag cctcaccaac gcttgaagcc tgaacccaag atgcaagaag	540
gaggetatge teaggggee tggageagee acceeatget ggeettgeea cactetteet	600
cctgctttaa ccaccccatc tgcattccca gctctaccct gcatggctga gctgcccaca	660
gcaggccagg tccagagaga ccgaggaggg agagtctccc agggagcatg agaggaggca	720
geaggactgt eccettgaag gagaateate aggaeeetgg acetgataeg geteeceagt	780
acaccccacc tetteettgt aaatatgatt tatacctaac tgaataaaaa getgttetgt	840
cttcccacc qc	852
<210> 1344 <211> 1258 <212> DNA <213> Homo sapiens	
<400> 1344 ggctctggac tggggacaca gggatagctg agccccagct gggggtggaa gctgagccag	60
ggacagtcac ggaggaacaa gatcaagatg cgctgtaact gagaagcccc caaggcggag	120
gctgagaatc agagacattt cagcagacat ctacaaatct gaaagacaaa acatggttca	180
agcatccggg cacaggcggt ccacccgtgg ctccaaaatg gtctcctggt ccgtgatagc	240
aaagatccag gaaatactgc agaggaagat ggtgcgagag ttcctggccg agttcatgag	300
cacatatgtc atgatggtat tcggccttgg ttccgtggcc catatggttc taaataaaaa	360
atatgggagc taccttggtg tcaacttggg ttttggcttc ggagtcacca tgggagtgca	420
cgtggcaggc cgcatctctg gagcccacat gaacgcagct gtgacctttg ctaactgtgc	480

```
540
gctgggccgc gtgccctgga ggaagtttcc ggtctatgtg ctggggcagt tcctgggctc
                                                                      600
cttcctqqcq gctgccacca tctacagtct cttctacacg gccattctcc acttttcggg
tggacagetg atggtgaceg gtecegtege tacagetgge atttttgeca cetacettee
                                                                      660
tgatcacatg acattgtggc ggggcttcct gaatgaggcg tggctgaccg ggatgctcca
                                                                      720
gctgtgtctc ttcgccatca cggaccagga gaacaaccca gcactgccag gaacagaggc
                                                                      780
                                                                      840
gctggtgata ggcatcctcg tggtcatcat cggggtgtcc cttggcatga acacaggata
tgccatcaac ccgtcccggg acctgccccc ccgcatcttc accttcattg ctggttgggg
                                                                      900
                                                                      960
caaacaggtc ttcagcaatg gggagaactg gtggtgggtg ccagtggtgg caccacttct
                                                                     1020
gggtgcctat ctaggtggca tcatctacct ggtcttcatt ggctccacca tcccacggga
                                                                     1080
gcccctgaaa ttggaggatt ctgtggcgta tgaagaccac gggataaccg tattgcccaa
gatgggatct catgaaccca cgatctctcc cctcaccccc gtctctgtga gccctgccaa
                                                                     1140
                                                                     1200
cagatettea gtecaceetg ecceaceett acatgaatee atggeeetag ageaetteta
agcagagatt atttgtgatc ccatccattc cccaataaag caaggcttgt ccgacaaa
                                                                     1258
      1345
1364
DNA
Homo sapiens
                                                                       60
àgggactgg ggccaagagc cgggagcgcg ggcgcaaagg caccagggcc cgcccagggc
gccgcgcagc acggccttgg gggttctgcg ggccttcggg tgcgcgtctc gcctctagcc
                                                                      120
atggggtccg cagcgttgga gatcctgggc ctggtgctgt gcctggtggg ctggggggt
                                                                      180
                                                                      240
ctgatcctgg cgtgcgggct gcccatgtgg caggtgaccg ccttcctgga ccacaacatc
gtgacggcgc agaccacctg gaagggcctg tggatgtcgt gcgtggtgca gagcaccggg
                                                                      300
                                                                      360
cacatgcagt gcaaagtgta cgactcggtg ctggctctga gcaccgaggt gcaggcggcg
egggegetea eegtgagege egtgetgetg gegttegttg egetettegt gaeeetggeg
                                                                      420
                                                                      480
ggcgcgcagt gcaccacctg cgtggccccg ggcccggcca aggcgcgtgt ggccctcacg
                                                                      540
ggaggcgtgc tetacetgtt ttgegggetg etggegeteg tgecaetetg etggttegee
                                                                      600
aacattgtcg teegegagtt ttaegaeeeg tetgtgeeeg tgtegeagaa gtaegagetg
                                                                      660
ggcgcagcgc tgtacatcgg ctgggcggcc accgcgctgc tcatggtagg cggctgcctc
                                                                      720
ttgtgctgcg gegeetgggt etgeacegge egteeegaee teagetteee egtgaagtae
                                                                      780
tcagegeege ggeggeeeae ggeeaeegge gaetaegaea agaagaaeta egtetgaggg
cgctgggcac ggccgggccc ctcctgccag ccacgcctgc gaggcgttgg ataagcctgg
                                                                      840
                                                                      900
ggagccccgc atggaccgcg gcttccgccg ggtagcgcgg cgcgcaggct cctcggaacg
teeggetetg egeeeegaeg eggeteetgg ateegeteet geetgegeee geagetgaee
                                                                      960
                                                                     1020
ttctcctgcc actagcccgg ccctgccctt aacagacgga atgaagtttc cttttctgtg
cgcggcgctg tttccatagg cagagcgggt gtcagactga ggatttcgct tcccctccaa
                                                                     1080
gacgctgggg gtcttggctg ctgccttact tcccagaggc tcctgctgac ttcggagggg
                                                                     1140
                                                                     1200
cggatgcaga gcccggggcc cccaccggaa gatgtgtaca gctggtcttt actccatcgg
                                                                     1260
caggecegag eccagggace agtgaettgg cetggaeete eeggteteae tecageatet
ccccaggcaa ggcttgtggg caccggagct tgagagaggg cgggagtggg aaggctaaga
                                                                     1320
                                                                     1364
1346
3635
DNA
Homo sapiens
<400> 1346 agatggctgc cgacagtgag cccgaatccg aggtatttga gatcacggac ttcaccactg
                                                                       60
                                                                      120
cctcggaatg ggaaaggttt atttccaaag ttgaagaagt cttgaatgac tggaaactga
                                                                      180
ttggaaactc tttgggaaag ccactcgaaa agggtatatt tacttctggc acatgggaag
agaaatcaga tgaaatttcc tttgctgact tcaagttctc agtcactcat cattatcttg
                                                                      240
                                                                      300
```

tacaagagtc cactgataaa gaaggaaagg atgagttatt agaggatgtt gttccacaat

					++	260
	tttgctgggt					360
	gctacgtgag					420
	taagtgcaac					480
	gccactcttt					540
	tcctggtgta					600
	tcacttatca					660
taactccatt	gcctccagtt	agtattgcta	ttcgatttac	ctatgtactt	caagattggc	720
agcagtattt	ttggcctcag	caacctccag	acatagatgc	ccttgtagga	ggagaagttg	780
gaggcttgga	gtttggcaag	ttaccatttg	gtgcctgcga	agatcctatt	agtgaactcc	840
atttagctac	tacatggcct	catctgaccg	aagggatcat	tgtggataat	gatgtttatt	900
ctgatttgga	tcctattcaa	gctccacatt	ggtctgttag	agttcgaaaa	gctgagaatc	960
ctcagtgttt	gctaggtgat	tttgtcactg	aatttttaa	aatttgccgt	cgaaaggagt	1020
caactgatga	gattcttgga	cgatctgcat	ttgaggaaga	aggcaaagaa	actgctgata	1080
taactcatgc	tttgtcaaaa	ttgacagagc	cggcatcagt	tccaattcat	aaattatcag	1140
tttcaaatat	ggtacacact	gcaaagaaga	aaatccgaaa	acacagaggt	gtagaggagt	1200
	taatgatgtt					1260
	attagatgga					1320
	tctctacaat					1380
_	tctctgtatg					1440
	atttgttctt					1500
	tggaccccca					1560
_	tattgaaaga					1620
	tatatatcca					1680
	aacagataag					1740
	agaattttt					1800
	caagaaagga					1860
	tgggaaactt					1920
	agcacctatg					1980
	atcggcagag					2040
	ggagtctttt					2100
	accccgggat					2160
	agaactgagt					2220
	taagccaatt					2280
	ggtgctgcac					2340
	tgtgattcat					2400
	agttaagaag					2460
						2520
	tccagaagac					2580
	tgccagagct					2640
	aaaggaagat					2700
	cggtgcagga					2760
	ggctgcagct					2820
	aaggcagaac					
	cactgtgccg					2880
	caccaaagag					2940
	cttctagcat					3000
	ggtaccaggg					3060
tgatcaggaa	tcaaaccagc	atcggaaaga	cttcccagca	ccaagcttga	gctgtgtcgt	3120

ttcgtggagg gggcagcgag	gatgggcttg	agctgttgag	agatttctgc	cctagagatg	3180
gcctttgtat atgggggggt	ggtggggga	cacaaacaca	tcagacactc	cgtcctcaca	3240
ctggcaggac ggtgttcatc	gcattctctt	ctgtgaccag	cctctaggct	agcggctgca	3300
ttcgtggtct gtgcaaacac	ttcgtggttc	tatatatcag	cagcaagtgt	gcaaaataaa	3360
ggacctgtta actcagattt					3420
tttttaaaat actacatgac					3480
ctaattaact gttgatgagc					3540
tttctctttt tcatgtaact					3600
atgtcactgc aaattagttt	-	-			3635
acgoodocgo addoodgooo	cacaccegec	acgeg			3033
<210> 1347 <211> 2103 <212> DNA <213> Homo sapiens					
<400> 1347 ctcgagatcc attgtgctct	aaagagtctc	caccaccatc	caggacccac	ttqcaqcatq	60
gagtcgcccg cctcgagcca					120
aagaaggatc tacggatatc					180
cggaacctgg actcccggac					240
gatgacttgg tgaccatctc					300
cggcacgccc agagcggcac					360
caggagcaga agcggctgct					420
tacactgtca ccttctacgg					480
ctcatggaca catccttgga					540
ccagaggaca tccttgggga					600
agcaagctgt cggtgatcca					660
ggccatgtga agatgtgtga					720
acgatggatg ccggctgcaa					780
cagaagggct acaatgtcaa					840
gccatcctgc ggttccctta			_		900
gtggaggagc cgtcccccca					960
actgctcagt gcctgaggaa		-			1020
cacccttct tcaccttgca					1080
atcctgggag aagactcata					1140
cacagcccca tctgcggggg					1200
					1260
agggcatctg ggaggaaccg					1320
cccaagtgcc aaagaagcag gtgcctctcc ctgctgctcc					1380
					1440
gcctggatgc cccctgtgga gatgggccac cgccttgccc					1500
cgactgaatg gactttgcac					1560
					1620
tgcggggtac acaagagggg gccatgagcc gcccaaggcc					1680
					1740
tggctcaccc agtcctgccc					1800
aatttatcct ctgttgattt					1860
gtttggagct gatcgcttct					1920
ctgctcaggc tggggtccag					1920
gageetteea geteactete					
aaaaaaagaa aatatatttt					2040
gggttggggc agttacctgg	LLYCLYLLL	uattaaaaaC	cccayaycac	aatyyatut	2100

2103 gag Homo sapiens <400> 1348 gccctggagg cccggcctgg ccgctcccgg ccctggggtg cacatcggcc ctgagtcccg 60 teccaggete tgggeteggg cageegeege caeegetgee caggaegteg ggeeteetge 120 180 cttcctccca ggcccccacg ttgctggccg cctggccgag tggccgccat gctcctgcct 240 tgggccacct ctgccccegg cctggcctgg gggcctctgg tgctgggcct cttcgggctc 300 ctggcagcat cgcagcccca ggcggtgcct ccatatgcgt cggagaacca gacctgcagg 360 gaccaggaaa aggaatacta tgagccccag caccgcatct gctgctcccg ctgcccgcca 420 ggcacctatg tctcagctaa atgtagccgc atccgggaca cagtttgtgc cacatgtgcc gagaatteet acaacgagea etggaactae etgaceatet geeagetgtg eegeeeetgt 480 540 gacccagtga tgggcctcga ggagattgcc ccctgcacaa gcaaacggaa gacccagtgc 600 cqctqccaqc cgggaatgtt ctgtgctgcc tgggccctcg agtgtacaca ctgcgagcta ctttctgact gcccgcctgg cactgaagcc gagctcaaag atgaagttgg gaagggtaac 660 aaccactgcg tcccctgcaa ggcagggcac ttccagaata cctcctcccc cagcgcccgc 720 tgccagcccc acaccaggtg tgagaaccaa ggtctggtgg aggcagctcc aggcactgcc 780 840 cagtccgaca caacctgcaa aaatccatta gagccactgc ccccagagat gtcaggaacc atgctgatgc tggccgttct gctgccactg gccttctttc tgctccttgc caccgtcttc 900 960 tectqeatet qqaaqaqeea eeettetete tgeaggaaac tgggateget geteaagagg 1020 cgtccgcagg gagagggacc caatcctgta gctggaagct gggagcctcc gaaggcccat 1080 ccatacttcc ctgacttggt acagecactg ctacccattt ctggagatgt ttccccagta tccactgggc tccccgcagc cccagttttg gaggcagggg tgccgcaaca gcagagtcct 1140 1200 ctggacctga ccagggagcc gcagttggaa cccggggagc agagccaggt ggcccacggt accaatggca ttcatgtcac cggcgggtct atgactatca ctggcaacat ctacatctac 1260 1320 aatggaccag tactgggggg accacegggt cetggagace teecagetae eecegaacet 1380 ccatacccca ttcccgaaga gggggaccct ggccctcccg ggctctctac accccaccag 1440 gaagatggca aggcttggca cctagcggag acagagcact gtggtgccac accctctaac 1500 aggggcccaa ggaaccaatt tatcacccat gactgacgga gtctgagaaa aggcagaaga aggggggcac aagggcactt tetecettga ggetgeeetg eecaegtggg atteacaggg 1560 1620 qcctgagtag ggcccgggga agcagagccc taagggatta aggctcagac acctctgaga gcaggtgggc actggctggg tacggtgccc tccacaggac tctccctact gcctgagcaa 1680 1740 acctgaggcc teceggcaga eccaeceace ceetgggget geteageete aggeaeggae 1800 agggcacatg ataccaactg ctgcccacta cggcacgccg caccggagca cggcaccgag 1860 ggagccgcca cacggtcacc tgcaaggacg tcacgggccc ctctaaagga ttcgtggtgc tcatccccaa gcttcagaga ccctttgggg ttccacactt cacgtggact gaggtagacc 1920 ctgcatgaag atgaaattat agggaggacg ctccttccct ccctcctag aggagaggaa 1980 2040 agggagtcat taacaactag ggggttgggt aggattccta ggtatgggga agagttttgg 2100 aaggggagga aaatggcaag tgtatttata ttgtaaccac atgcaaataa aaagaatggg 2136 acctaaactc gtgccgctcg tgccgaattc ctgcag 1349 1792 DNA Homo sapiens <400> 1349 gaattccata tcatggcctg ccgccgccgc cgccgccgcc ggagctctgt agtatggcat 60 cgaggagaat ggagaccaaa cctgtgataa cctgtctcaa aaccctcctc atcatctact 120 ccttcgtctt ctggatcact ggggtgatcc tgctggctgt tggagtctgg ggcaaactta 180 ctctgggcac ctatatctcc cttattgccg agaactccac aaatgctccc tatgtgctca 240

```
300
teggaactgg caccactatt gttgtetttg geetgtttgg atgetttget acatgtegtg
gtagcccatg gatgctgaaa ctgtatgcca tgtttctgtc cctggtgttc ctggctgagc
                                                                     360
                                                                     420
tcgtagctgg catttcaggg tttgtgtttc gtcatgagat caaggacacc ttcctgagga
                                                                     480
cttacacgga cgctatgcag acttacaatg gcaatgatga gaggagccgg gcagtggacc
                                                                     540
atgtgcagcg cagcctgagc tgctgtggtg tgcagaacta caccaactgg agcaccagcc
                                                                     600
cctacttcct ggagcatggc atcccccca gctgctgcat gaacgaaact gattgtaatc
                                                                     660
cccaggatct acacaatctg actgtggccg ccaccaaagt taaccagaag ggttgttatg
                                                                     720
atctggtaac tagtttcatg gagactaaca tgggaatcat cgctggagtg gcgtttggaa
                                                                     780
tegeattete ecagttaatt ggeatgetge tggeetgetg tetgteeegg tteateaegg
ccaatcagta tgagatggtg taaggagaag tctttcaaga atgacggaat aagagacctg
                                                                     840
                                                                     900
ttttaaaaag gaactgcagc aatctttgaa agacttccaa agaatgttag agcacagtac
                                                                     960
ataatacact tgccctgctc cctctacccc ttaccccaca acgtgcaact gacactccca
                                                                    1020
cccagtetet getecacett teageceacg teacgtgtag tgtecatttt gtgaageeet
                                                                    1080
gttgtgccac agagtgtagc caggtccccc tgcagctagt cctagtgaac ctcaccccga
                                                                    1140
ggccctgcat gggccagccc ctccatctgt acttggtcca actgcaactc atcatcggtg
                                                                    1200
actggttatc acaccatege tggcccettt gggccctgca tgtagtgtgg gaggeteetg
ttagctcctc actgtggtaa atgccacaca cctttaagta gataagcaga cgatagttat
                                                                    1260
ctgttctttt gacttaatct catttggttt gattttccct ctactaaggc tttcctacct
                                                                    1320
tetteagget geetaagaea tgtaaegaaa caetteaata attgteeatg aggagaaaaa
                                                                    1380
                                                                    1440
aagcatgtgt catgcatgaa ggaaactgaa cttgaggtgg cctccttgct tgttacatac
ctgggtatgt gtaggcagtt tagtgcatct ttgcctctca gttgaaacct gtataaccct
                                                                    1500
                                                                    1560
gttacaaagc tgtgttgttg cttcttgtga aggccatgat attttgtttt tccccaatta
                                                                    1620
attgctattg tgttatttta ctacttctct ctgtattttt tcttgcattg acattataga
                                                                    1680
cattgaggac ctcatccaaa caatttaaaa atgagtgtga agggggaaca agtcaaaata
tttttaaaag atcttcaaaa ataatgcctc tgtctagcat gccaacaaga atgcattgat
                                                                    1740
                                                                    1792
attgtgaaca tttgtgatat atgtattaat aaatagagca attacggaat tc
      ĎŇĂ
Homo sapiens
<400> 1350
ggctggggcc tgaggcctgg ggctcaccca cgcccccgcc gacgcctgcc gcgccgccgc
                                                                      60
                                                                     120
cacccccgcc acccggagcc ccgggtggct cgcaggacac ctgtacgtcg tgcggcgct
                                                                     180
teeggeggee agaggagete ggeegagtgg aeggegaett eetggaggeg gtgaagegge
acatettgag cegeetgeag atgeggggee ggeecaacat caegeaegee gtgeetaagg
                                                                     240
ccgccatggt cacggccctg cgcaagctgc acgcgggcaa ggtgcgcgag gacggccgcg
                                                                     300
                                                                     360
tqqaqatccc qcacctcgac qgccacgcca gcccgggcgc cgacggccag gagcgcgttt
                                                                     420
480
tetteatete caacgaagge aaccagaace tgtttgtggt ccaggecage etgtggettt
                                                                     540
acctgaaact cctgccctac gtcctggaga agggcagccg gcggaaggtg cgggtcaaag
                                                                     600
tgtacttcca ggagcagggc cacggtgaca ggtggaacat ggtggagaag agggtggacc
                                                                     660
tcaagcgcag cggctggcat accttcccac tcacggaggc catccaggcc ttgtttgagc
ggggcgagcg gcgactcaac ctagacgtgc agtgtgacag ctgccaggag ctggccgtgg
                                                                     720
                                                                     780
tgccggtgtt cgtggaccca ggcgaagagt cgcaccgacc ctttgtggtg gtgcaggctc
                                                                     840
ggctgggcga cagcaggcac cgcattcgca agcgaggcct ggagtgcgat ggccggacca
                                                                     900
acctctgttg caggcaacag ttcttcattg acttccgcct catcggctgg aacgactgga
                                                                     960
tcatagcacc caccggctac tacggcaact actgtgaggg cagctgccca gcctacctgg
caggggtccc cggctctgcc tcctccttcc acacggctgt ggtgaaccag taccgcatgc
                                                                    1020
                                                                    1080
ggggtctgaa ccccggcacg gtgaactcct gctgcattcc caccaagctg agcaccatgt
```

```
ccatgctgta cttcgatgat gagtacaaca tcgtcaagcg ggacgtgccc aacatgattg
                                                                  1140
tggaggagtg cggctgcgcc tgacagtgca aggcaggggc acggtggtgg ggcacggagg
                                                                  1200
                                                                  1260
gcagtecegg gtgggettet tecageceee egegggaaeg gggtacaegg tgggetgagt
acagtcattc tgttgggctg tggagatagt gccagggtgc ggcctgagat atttttctac
                                                                  1320
                                                                  1380
agetteatag ageaaceagt caaaaceaga gegagaacee teaactgaca tgaaataett
taaaatgcac acgtagccac gcacagccag acgcatcctg ccacccacac agcagcctcc
                                                                  1440
                                                                  1500
aggataccag caaatggatg cggtgacaaa tggcagctta gctacaaatg cctgtcagtc
                                                                  1560
ggagagaatg gggtgagcag ccaccattcc accagctggc ccggccacgt ctcgaagttg
                                                                  1620
cgccttcccg agcacacata aaagcacaaa gacagagacg cagagagaga gagagagcca
                                                                  1680
cggagaggaa aagcagatgc aggggtgggg agcgcagctc ggcggaggct gcgtgtgccc
                                                                  1740
cgtggctttt accaggcctg ctctgcctgg ctcgatgtct gcttcttccc agcctgggat
                                                                  1800
ccttcgtgct tcaaggcctg gggagcctgt ccttccatgc ccttgtcgag ggaaagagac
ccagaaagga cacaacccgt cagagacctg ggagcagggg caatgaccgt ttgactgttt
                                                                  1860
                                                                  1920
agagaagagg gggctaaatt tgatgcttta actgatctcc aacagttgac aggtcatcct
                                                                  1980
                                                                  2040
tgccagttgt ataactgaaa aaggactttt ctaccaggta tgacctttta agtgaaaatc
                                                                  2100
tgaattgttc taaatggaaa gaaaaaaagt tgcaatctgt gcccttcatt ggggacattc
                                                                  2160
ctctaggact ggtttgggga cgggtgggaa tgacccctag gcaaggggat gagaccgcag
                                                                  2220
gaggaaatgg cggggaggtg gcattcttga actgctgagg atggggggtg tcccctcagc
                                                                  2280
ggaggccaag ggaggggagc agcctagttg gtcttggaga gatggggaag gctttcagct
                                                                  2340
gatttgcaga agttgcccat gtgggcccaa ccatcagggc tggccgtgga cgtggcccct
                                                                  2400
geocacteae etgeocgeet geocgeocge cegeatagea ettgeagace tgeotgaacg
cacatgacat agcacttgcc gatctgcgtg tgcccagaag tggcccttgg ccgagcgccg
                                                                  2460
                                                                  2520
aactcgctcg ccctctagat gtccaagtgc cacgtgaact atgcaattta aagggttgac
                                                                  2580
ccacactaga cgaaactgga ctcgtacgac tctttttata ttttttatac ttgaaatgaa
                                                                  2640
atcctttgct tcttttttaa gcgaatgatt gcttttaatg tttgcactga tttagttgca
tgattagtca gaaactgcca tttgaaaaaa aagttatttt tatagcagc
                                                                  2689
      DNA
Homo sapiens
<400> 1351 aggetetgee gtteagetge egegggeggg geeggggeet geggegtegt gegeegtgeg
                                                                    60
                                                                   120
ggaccagttc caggegggeg agaccgegca gggeggggeg gggegaggeg geegcaggge
ggggagggcg gggagaggcg gccgcagggc ggggaggcg gggcgcgaag ccgggggcgg
                                                                   180
                                                                   240
gggccacgcg tggggcaggc ggtgctcggc tcggctgacg tcggcccgcc ggcgccccac
cacgtccgcg cgggcccggg ttgccaccgc cggcccccgc ccctcccccg gcggtgtccc
                                                                   300
                                                                   360
ggccggaacc gatcgtggct ggtttgagct ggtgcgtctc catggcgacc cgccggtgct
ataagtaggg ageggegtge egtggggett tgteagteee teetgtagee geegeegeeg
                                                                   420
                                                                   480
ccgccgcccg ccgcccctct gccagcagct ccggcgccac ctcgggccgg cgtctccggc
                                                                   540
gggcgggagc caggcgctga cgggcgcggc gggggcggcc gagcgctcct gcggctgcga
                                                                   600
ctcaggetcc ggcgtctgcg cttccccatg gggctggcct gcggcgcctg ggcgctctga
                                                                   660
gegggeeegg geeegggeae gtgtgeggeg egeetegeeg geetgeggag acaegtggte
                                                                   720
                                                                   780
geegageggg ccaegacett gaggegeege tteeteeegg ceeggggtte teeeggget
                                                                   840
ggataagggt gatccgggcg cetcgttctg cecegtett cacagetcgg ggetggaggg
                                                                   900
gcctagggga gacccacccg gagaccctgc ggccccgcgc cggcctcttt cccaaccctt
                                                                   960
eggeggeege gegetggeeg gggageegtt ggggaggeee tggeggeege geageaggtg
                                                                  1020
caggggcgca gagcctgggc tcgccttggt acagacgagc gggccccggc cttggcgcct
```

1080 tcagtttcct tccagttttt attttcgctg tgtctacaga gcagatgaca ccaatttgga aacccgcgag agtgggtaga gctaagatag tcttgctgta gtagctgtga tattagatgc 1140 1200 tcggccatga cttagaggtg tttatttaag gactgtgaat gactcggtga tttcggaaaa 1260 gcttggctta gatgaacgga catacacagg ggagacagcc ctaaggtttg cagaaaaggc 1320 tgattgtgct gtttgcgaag tcgaaataat tggtgaaagt gtagaaggca gaacctctca ggaatgtctg gggaggacaa agaatgtgtt ggctgacttt gtttaaacat aaaattgggc 1380 agactttaat tgatttgtga aattttttc aaagtttgtt tgaattagcc cctatctctt 1440 ctaacattat cctcttgtgc taattgattg accattttaa ataacttagc tgttacagaa 1500 1560 agaccgaaag gtgttcttca gtaaaatata ttcaagtaag ttacttaagt aacgccttaa aagatacaga aaagcaaaaa agtattggcg tattaaaaaag aaatcaaaac tttccaagtt 1620 taggcctgaa cattgcctta aaaatattta ataaggcctc aaatgaccca gtccgagact 1680 1740 gcatgagcct atttattatt aaattgtaaa tattcttcat ataaacaaaa atatataacc atgtctgtaa caaaaatggt tttgctagcg ttgttactct cttcccttct ccgaggggtg 1800 1860 atttaggcaa cttcggaggt tgacaatgcc aagcagtcac aatagataga gctttaaagc 1920 aaattctatg catgggtttg gatttatgac aggcccgtca ccctgggcct gtcatagtac 1980 cccatgccag agcaaactgt gtccccgaac cattgcctgg cctctgtgcc cgtaggctgc 2040 tggcactgaa gtgggttgca cagtggaaaa gaagaaagct ctacctggca gaaattttta aaggttaaaa taaataattt taagaaagct ggttcacaag gtgccacatt tgatgaaagc 2100 2160 aaaatacagt ggcttttatt gttactagag tgatgttctt gcttgttttt cttttttggt gaagttagcc ccaaattatt ctcatagcta agcaaatacg agagtgactg taaggacagt 2220 2280 tggcattccc ggaattgcta aacttggtag gcaacgctgg tttaagaata ctgagttcta 2340 gccgggcgtg gtggctcacg cctgtaatcc caacactttg ggaggctgag gcaggcggat cacctgaggt cgggagttgg agaccagcct gactaacatg gagaaacgcc atctccacta 2400 2460 aaaatataaa attagccagg ccccgggtgt ggtggcacat gccggtaatc ccagctactc gggagactga ggcaggagaa tcgcttgaac ccaggaggcg gaggttgagg tgagccgaga 2520 2580 2640 aaaaaatact gaattetgat caggtaacag caactgtaat acaatgtgat aagttgactt 2700 gaagattaca gtttttaaga agtatatacc cagctaatac atgaaaatta actcgtaaaa 2760 tctcaaatgc tccagacatt tccatgatgc ctgttggtca gtaaaaatca ttctaagact tagtggaagt aggaaatgtt tgtatggcaa cgtggtgaaa tcctgtctct actaaaaatg 2820 2880 tgtataaagg ctataatgta atcccagcac tttggaagac cgaggcgggt ggatcacctg gggtcaggag tttgagaccc acctggacca caaaaattag ccgggcatgg tggcaggcgc 2940 3000 ctgtaatccc agctgctggg gaggctgagg caggagaatc gcttgaaccc gggaggcaga 3060 ggttgcagtg agccaagatt gcaccgctgc actccagcct gggtgacagc gtgagactct gtctcaaaaa aaataaaaaa gtctataatg ctattttaag tttctaagga actgaaactg 3120 3180 ctctgaaata aatcagacca ttataagact tttttccata tcagtgagct aagtgcagat 3240 aagcttctga aacttgcatg ctagattttt ttggtacaaa tatttgaaat gcttagtgtg 3300 ctqccttgga aaaacctggt attttttgtt gtgtccttat actgccaagg tttatggaat 3360 catgtacctt atgcctagta ataattagga tgaccaggcc agtgagtggt tcatatccgg 3420 ggcatgatta gctctgcgtg tgctcagcca gtgccccatc ttcaactcga tgtgttccta aggtagacag caaattccct attttatttc tcagattgtc actgctgttc caagggcaca 3480 cgcagaggga tttggaattc ctggagagtt gcctttgtga gaagctggaa atatttcttt 3540 3600 caattccatc tcttagtttt ccatgtaagt attcagttta catttatgtt gcaggttaat 3660 cttaagaatt gtattgctaa ggcttctaag tgaatttctc cactctattt gcattttgtt 3720 gcatttcaga ggaacatcaa gaaatcatga acaactttgg taatgaagag tttgactgcc 3780 acttcctcga tgaaggtttt actgccaagg acattctgga ccagaaaatt aatgaagttt cttcttctgt aagtatatga ggcccatgct ggcagtgcag ctgagagtgc caggcaagtg 3840

	gcaaggtcta					3900
	tcactggtgg					3960
=	gagcaggatt					4020
	tgaggctgct					4080
gatgccttct	atgtggcaga	cctgggagac	attctaaaga	aacatctgag	gtggttaaaa	4140
_	gtgtcacccc					4200
aagacccttg	ctgctaccgg	gacaggattt	gactgtgcta	gcaaggtaag	cgatagcagc	4260
aggcctcaaa	agcgttgtat	aaaatgggcc	tggtattccc	cacgaggcag	atacaagttg	4320
tgttttttgg	gcaataaatg	ctcactaaag	gcaaatgggg	cgggggggta	catgacaact	4380
tcccatgctt	ttctgtttat	tccacgtgtt	aagccacata	tggatagcat	gacaccactc	4440
ttcttttca	gactgaaata	cagttggtgc	agagtctggg	ggtgcctcca	gagaggatta	4500
tctatgcaaa	tccttgtaaa	caagtatctc	aaattaagta	tgctgctaat	aatggagtcc	4560
agatgatgac	ttttgatagt	gaagttgagt	tgatgaaagt	tgccagagca	catcccaaag	4620
caaagtgagt	tattccccca	tctgagggca	agatcgggag	cataagatat	gtggattctt	4680
atcaaacaaa	cttaaatttc	tgattattat	atttctatac	tttagtagaa	agtagttgaa	4740
acccccattg	agtcatgaag	cctgggactc	aaactacaga	atatatcagc	gacagtattt	4800
agaacaggat	tgtttttatt	ttaattgtgg	ctataagtga	acatctatca	tgagacattt	4860
gctgcacttt	ccttgcttgt	aggttggttt	tgcggattgc	cactgatgat	tccaaagcag	4920
tctgtcgtct	cagtgtgaaa	ttcggtgcca	cgctcagaac	cagcaggctc	cttttggaac	4980
gggcgaaaga	gctaaatatc	gatgttgttg	gtgtcaggtg	agattttggt	gggatagcta	5040
gaggtcaaga	cattgaacag	tttgagtttt	acaggctttc	tcctagtgtt	tgctattatt	5100
ttaagaaata	ctaagacaca	gtgtctcgtc	tctttattt	accccagctt	ccatgtagga	5160
agcggctgta	ccgatcctga	gaccttcgtg	caggcaatct	ctgatgcccg	ctgtgttttt	5220
gacatggggg	tgagtatacg	tgaccctgtt	agggaagggc	gggacacaac	tgacaataac	5280
tagtcttaat	tctagagtta	actttttatg	gcagttggtt	ctgtattaca	tgggtttcag	5340
cctatctgct	gcatacattt	ttgttattag	ctgtggatct	ggctgactta	ttttcttgat	5400
tctaggctga	ggttggtttc	agcatgtatc	tgcttgatat	tggcggtggc	tttcctggat	5460
ctgaggatgt	gaaacttaaa	tttgaagagg	taatttagaa	caaaactgta	atactcagta	5520
gccgttctaa	taaattcctt	tttggaatat	ttcaaaattt	aagtgtctta	actaatacca	5580
caatgggctg	aagtgtcttg	gtgtgatatt	tttgagtgat	ttctttgtgc	tgtctgacat	5640
tacacttgat	accatttggt	tttctaaagt	gtgaatcagc	tttcccagaa	gtcttggata	5700
attggttaca	ttggaaatca	tggctcacac	ctgtaatcca	gcacttgggg	aggccaaggt	5760
ggtaggatca	cttgagccca	ggagtttgag	accagcctgg	gcaacacagt	gagaccccat	5820
ctctacaaaa	aaaattttaa	aattagcctg	gtgtggtggc	gggcacctgt	aatcccagct	5880
acttggaagg	ctgaggtggg	aggatcactt	gagcccagga	ggttgaggct	gcagtgagcc	5940
atgatcatgc	cactgcactc	agcctgggct	acagagtgag	accctgtctc	aaaaaaaaa	6000
aagaaaaagc	atgttgctgt	gggcttccta	gagaatatgc	tgactgtagc	acatcatcac	6060
cccaaatgtg	ctttgctaga	cctatgcttc	ctctccttaa	aatacttgaa	atgtttagtc	6120
	ttaagccatt					6180
	tgacgtaggc					6240
	tcttgatgcc					6300
	ataacatcct					6360
	gtagcctggt					6420
	ctgtctgttg					6480
	catgtgaatt					6540
	cggcgtaatc					6600
	agctgagccc					6660
atatcattgc	caagaaaatt	gtattaaagg	aacagacggg	ctctgatggt	atgtataaag	6720

```
gacgaatcac ttcatgtata actgaaagct gatgcaaaaa gtcattaaga ttgttgatct
                                                                     6780
gcctttctag acgaagatga gtcgagtgag cagaccttta tgtattatgt gaatgatggc
                                                                     6840
                                                                     6900
gtctatggat catttaattg catactctat gaccacgcac atgtaaagcc ccttctgcaa
aaggtaattt ctgagcatac tgtataaaac aattaagagg actggtcaca acacgtgtaa
                                                                     6960
                                                                     7020
ttaagtagta cttcctctct ccgtctcttt atatagagac ctaaaccaga tgagaagtat
tattcatcca gcatatgggg accaacatgt gatggcctcg atcggattgt tgagcgctgt
                                                                     7080
gacctgcctg aaatgcatgt gggtgattgg atgctctttg aaaacatggg cgcttacact
                                                                     7140
                                                                     7200
gttgctgctg cctctacgtt caatggcttc cagaggccga cgatctacta tgtgatgtca
                                                                     7260
gggcctgcgt ggtaagtaag ccatgcatgt tgatggtgct gccaagaata ggcaccttct
tggatgtgtg cttcttgtct agacgaataa gaaattgtct tgcctaagat taaatatata
                                                                     7320
                                                                     7380
tggatatttt tcctaagaaa agttttagaa aagactgatg agtgtatttc tatgtaattg
                                                                     7440
gaatatattt aagttcatgc catgtgtctt gtggtttcct tattaccaaa acggtgactg
                                                                     7500
aagaaacgct tgctttagaa atacattgaa ttggccaggt gtgctggctc acacctgaaa
tcacaacaca ttgggaggcc aaggcagaag gatcacttga gcccaggagt tcgagcctgg
                                                                     7560
gcaacatagt gagaccctgt ctctacaaaa aattaaaaaa ttagttggcc atggtagtgg
                                                                     7620
gcgcctgtag tcccagctgc ttggctaagg tgagaggttt gcttgagcct gggaggttga
                                                                     7680
                                                                     7740
ggctgcggtg agctatgata gcaccattgt attccagcct gagtaacaga gaaagaccct
gtctcagaaa aaaaaaaaat acattgaatt gtttcctgat ggaagtaaat actctcatgc
                                                                     7800
                                                                     7860
ccagttagga gtgagtcagg gtttttaata tgccactttt tctttctcag gcaactcatg
                                                                     7920
cagcaattcc agaaccccga cttcccaccc gaagtagagg aacaggatgc cagcaccctg
cctgtgtctt gtgcctggga gagtgggatg aaacgccaca gagcagcctg tgcttcggct
                                                                     7980
agtattaatg tgtagatagc actctggtag ctgttaactg caagtttagc ttgaattaag
                                                                     8040
ggatttgggg ggaccatgta acttaattac tgctagtttt gaaatgtctt tgtaagagta
                                                                     8100
gggtcgccat gatgcagcca tatggaagac taggatatgg gtcacactta tctgtgttcc
                                                                     8160
tatggaaact atttgaatat ttgttttata tggattttta ttcactcttc agacacgcta
                                                                     8220
                                                                     8280
ctcaagagtg cccctcagct gctgaacaag catttgtagc ttgtacaatg gcagaatggg
                                                                     8340
ccaaaagctt agtgttgtga cctgttttta aaataaagta tcttgaaata attaggcatt
                                                                     8400
gggacgtttt tatggtgtgt tcattccaga cagttcacga atcccgtata gctcgctctg
atteteagag aacaatgagt gggteeacce acacacaggt aggaggacag gtgagaegga
                                                                     8460
agccccatcc tcccatgtgg acggtgcaca tctgctcagc ccaccccaca tgtccagagt
                                                                     8520
tggctgcaaa ctccttgtcc agagcctctg gtggtgggac ctacttaagt ctgacggacc
                                                                     8580
tgtcctgtcc aggccagtgc ccagggaagg tgtgggaggc cctttgagcc tggcctgcag
                                                                     8640
                                                                     8700
agaccatccg tgtcccctcc caccttcatg cctgtgagaa gttaggaatg tatacggtac
cacatttggc agtcagctta ttttaataaa ttcagcaaca gcaagtccct accatgttgt
                                                                     8760
gtatetteae catettgtet gaccatgace actggeettg tgtgttettt taeteaacgt
                                                                     8820
gtaccccgc tctccccaa a
                                                                     8841
      1352
4270
DNA
Homo sapiens
agagtcctgg atgagacggc tcgagagcgt gcccggctgc agatagagat tgggaagctg
                                                                       60
agggcagagt tggacgaggt caacaagagc gccaagaaga gggagggcga gcttacggtg
                                                                      120
                                                                      180
gcccagggcc gtgtgaagga cctggagtcc ctgttccacc ggagcgaggt ggagctggca
getgeeetea gegaeaageg eggeetggag agtgaegtgg etgagetgeg ggeeeagetg
                                                                      240
gccaaggccg aggacggtca tgcagtggcc aaaaagcagc tggagaagga gacgctgatg
                                                                      300
cgtgtggacc tggagaaccg ctgccagagc ctgcaggagg agctggactt ccggaagagt
                                                                      360
gtgttcgagg aggaggtgcg ggagacgcgg cggcggcacg agcggcgcct ggtggaggtg
                                                                      420
gacagcagcc ggcagcagga gtacgacttc aagatggcac aggcgctgga ggagctgcgg
                                                                      480
```

agccagcacg	acgagcaagt	gcggctctac	aagctggagc	tggagcagac	ctaccaggcc	540
aagctggaca	gcgccaagct	gagctctgac	cagaacgaca	aggcggccag	tgcggctcgc	600
gaggagctga	aggaggcccg	catgcgcctg	gagtccctca	gctaccagct	ctccggcctc	660
cagaagcagg	ccagtgccgc	tgaagatcgc	attcgggagc	tggaggaggc	catggccggg	720
gagcgggaca	agttccggaa	gatgctggac	gccaaggagc	aggagatgac	ggagatgcgg	780
gacgtgatgc	agcagcagct	ggccgagtac	caggagctgc	tggacgtgaa	gctggccctg	840
gacatggaga	tcaacgccta	ccggaagctc	ctggagggcg	aggaggagag	cctgaagctg	900
tccccagcc	catcttcgcg	cgtcaccgtc	tcacgagcca	cctcgagcag	cagcggcagc	960
ttgtccgcca	ccgggcgcct	gggccgcagt	aagcggaagc	gctggaggtg	gaggagccct	1020
tggcagcggc	ccaagcgtcc	tgggcacggg	cacgggtggc	agcggtggct	tccacctggc	1080
ccagcaggcc	teggeetegg	gcagcgtcac	atcgaggaga	tcgacctgga	gggcaagttt	1140
gtgcagctca	agaacaactc	ggacaaggat	cagtctctgg	ggaactggag	aatcaagagg	1200
caggtcttgg	agggggagga	gatcgcctac	aagttcacgc	ccaagtacat	cctgcgggcc	1260
ggccagatgg	tcacggtgtg	ggcagctggt	gcgggggtgg	cccacagccc	cccctcgacg	1320
ctggtgtgga	agggccagag	cagctggggc	acgggcgaga	gcttccgcac	cgtcctggtt	1380
aacgcggatg	gcgaggaagt	ggccatgagg	actgtgaaga	agtcctcggt	gatgcgtgag	1440
aatgagaatg	gggaggaaga	ggaggaggaa	gccgagtttg	gcgaggagga	tcttttccac	1500
	acccgaggac					1560
catccacaca	cctttcttta	cccagagcca	ctgaaaacta	ttttttatca	ttggctttct	1620
ttagttcttg	atacatttct	agagaatttc	taagcgaact	gccagaacgt	gtgggtgggt	1680
	cctcctcct					1740
	gacttttcaa					1800
agcccagggc	caggacccgg	aggtttagaa	gatgcttggg	cttggaggga	ggagggccgg	1860
	gaggggacag					1920
	gtggtgggtt					1980
gtcgacctgg	tggggcccgg	ggcaagcctg	cattctggct	gcccagcttc	ggacagcggg	2040
aactcctcag	gcagccacgc	agcgggtgtg	ggccagcatg	gggatggcgt	ggccccaggg	2100
gggttttcac	tccgctgcct	gggcttccag	attcccgttc	tggcagcgac	cggccgggtt	2160
tctcggaccg	ttgactttat	ttgggggagt	tttcccgcag	ttcagttcct	gactgtgcaa	2220
ggccaacagg	gcaggggagg	ggaagacctg	gggaaggaag	aatgaggaca	cagtcccgtc	2280
gtaagacctg	tcacaacaat	aagcagggag	gggagatgtg	gaggggacac	atctggttgc	2340
cttggaggca	gaagctgtga	gtttcagaac	agctgtctgc	agggaacgcc	accatgttga	2400
ccctctggag	gagagcgctg	tggagcccct	cccgtgttcc	agctccgtct	gccctgtgcc	2460
tatatatcac	atgcgtctat	catactgtgt	ctttatctgt	gatttttctc	gctgaaacat	2520
gtttctcaga	cagccaaggc	cacctgactc	ctatcacgac	gcacccaagc	ccctcagtcc	2580
agcttcccaa	tgcctggcac	ccccttcggc	aatagctcac	cgtttacacc	ctccctcata	2640
gatacacaga	agttatttt	ttaatggata	tttattttt	tacattggtc	agtacacagg	2700
tcagggagct	cacgccaggg	ccttgaggac	aggctgaccc	tcctccccgg	ggtggcgtgg	2760
ggctggggca	ccccgacgg	cagagcctcc	ttcagaaagt	gcagctcaag	tcttaaagac	2820
accaaaactg	agccatgggc	acgcgccgtc	tccgggccat	ggcgttcact	gcagggcggg	2880
ggcggcaccg	ctcccctgtg	actgcatccc	gcctccctgg	ggacctgcct	gtggcaggaa	2940
ggaatggggg	gccccagccc	aggccgggaa	ggagccagcg	gccgacaaag	cagaaacacc	3000
gctgctccac	gtagcccctg	ctggctgtcc	ttgctctcag	aagtcccggt	cccatgtaga	3060
tagagcccgg	cggatcttac	caaagcattt	cctcctggag	gctacgccgc	ttggtgctcc	3120
cagtgaggcg	gctggtaggg	agctttgcct	gccccgggga	taccctctac	cagccgctgg	3180
aagtgggaat	gctggcgaca	gactgtgtct	gtttcccacc	ttcatagcag	gaatcacccg	3240
gacccgactg	gctgggcttc	gtgctagcga	gggttttctg	ggggtgggtc	ttggtgatct	3300

```
tgtcctatgg ggatctctgc agtggtctca gccacatcct agtatatttt ggctctggag
                                                                   3360
gagcaaagct gtatcctgga gttggtctgt gatttgccga cagacttgca ggctgggctc
                                                                   3420
3480
aaaacagcac gccccaggcc cacagaaccc cccaccctac atttgccttg ggtggagctg
                                                                   3540
ggggtggtcc taggactgcg ggtgccctta gctgaagggg gcccgcagaa gcgtgagctg
                                                                   3600
ggccgcctgt gggtcattgg aggttcattg agaattgagt cctttggaaa gactaagaaa
                                                                   3660
atcaaatttt taaaagttat ttatggcctg ggaaacaatt tgcatttgtc cccaaatacg
                                                                   3720
3780
tgactcgaag cctagcgccc tccctgcgaa gcatcagacg ccacccagcc ctgggggagg
                                                                   3840
cccacgcctg ctggaccaac gcgggttctg gggtgcacag cgccaggtta acgctgaagc
                                                                   3900
ctgccccgct gagcccaaga gccgggaggc ctgcgggctg acccagaatc cgatcatgca
                                                                   3960
cetgteetea tgceagegge tttggetggg gttggtetga ageetgeaeg eggeagttet
                                                                   4020
ttgttaaaga tctgagggac tcgtcagtcc tagcgtcgcc gcctgcagcc tcttccaagc
                                                                   4080
cctgcgtcca gcgagcgtca cagcacaacc tgcaaaaacg gagctgggct gcagctgggg
                                                                   4140
ctggcatgga ctttcatttc agagattcgg tttttaagaa gatgcatgcc tagcgtgttc
                                                                   4200
tttttttttt ccaatgattt gtaatataca ttttatgact ggaaactttt ttgtacaaca
                                                                   4260
ctccaataaa
                                                                   4270
      1353
1375
DNA
Homo sapiens
<400> 1353
tcgaattccg gaagccgctc ccgacaccct ttgcctggct ctgtccatat tagttcccag
                                                                     60
geggeegteg egtteeagea geggeaegea gegeaggegg ageggeageg gggeetegge
                                                                    120
tctatagagc cgagccgctg gtacccgccc ggtaccgcgc gagccagtgc ccctggatct
                                                                    180
tgcctctgct ccgacgccgt tccccaccag ttagcgacag cgcccgcccc tctgaggaga
                                                                    240
cacgaaggtg gttccccagc cgctcaaatt tccggaccac cgcgctttcc cctcctcagc
                                                                    300
ctgggctgtg ctctctctag aatcctcggg ccccacttt cttcccaaac tcatcctaaa
                                                                    360
teteteacae aegegagtgt teecageeet caagecaget geteeteete egtteatttt
                                                                    420
etgeceetet tegeaaagea eeeeegggat cateeteega gggegaettt ttgagaaate
                                                                    480
                                                                    540
tcggtggagt agtggaccag agcaggggag tttttaaaag ccggggcgcg agaaacagga
aggtactatg gcttcctcgt ctggcaacga tgatgatete actatececa gagetgetat
                                                                    600
caataaaatg atcaaagaga ctcttcctaa tgtccgggtg gccaacgatg ctcgagagct
                                                                    660
ggtggtgaac tgctgcactg aattcattca ccttatatct tctgaagcca atgagatttg
                                                                    720
taacaaatcg gaaaagaaga ccatctcacc agagcatgtc atacaagcac tagaaagttt
                                                                    780
gggatttggc tcttacatca gtgaagtaaa agaagtcttg caagagtgta aaacagtagc
                                                                    840
attaaaaaga agaaaggcca gttctcgttt ggaaaacctt ggcattcctg aagaagagtt
                                                                    900
attgagacag caacaagaat tatttgcaaa agctagacag caacaagcag aattggccca
                                                                    960
acaggaatgg cttcaaatgc agcaagctgc ccaacaagcc cagcttgctg ctgcctcagc
                                                                   1020
cagtgcatct aatcaggcgg gatcttctca ggatgaagaa gatgatgatg atatctgaaa
                                                                   1080
ttcaccagct gagtttctat ttcttctata aatgtttttc cctgcacaac aaaaacagtg
                                                                   1140
aaagaaatgc ttatctgtaa ttttgtatgc atcttggtgg acttgtcatt ggtattctag
                                                                   1200
agatgtetge tataagttte atetgttgtg tgetataeat gtaaaaaetg tetetttgaa
                                                                   1260
ctattgaaaa tttaaggttc agtataatat caattttgaa tttttcctgg tgtttatgaa
                                                                   1320
attttagata gcagcaagtc ttcgtttgat cataaacagt gtacagataa ctcaa
                                                                   1375
      1354
3358
DNA
Homo sapiens
<400> 1354
gagctggagc agccgccacc gccgccgccg agggagcccc gggacggcag cccctgggcg
                                                                     60
```

cagggtgcgc	tgttctcgga	gtccgaccca	gggcgactca	cgcccactgg	tgcgacccgg	120
acagcctggg	actgacccgc	cggcccaggc	gaggctgcag	ccagagggct	gggaagggat	180
cgcgctcgcg	gcatccagag	gcggccaggc	ggaggcgagg	gagcaggtta	gagggacaaa	240
gagctttgca	gacgtccccg	gcgtcctgcg	agcgccagcg	gccgggacga	ggcggccggg	300
agcccgggaa	gagcccgtgg	atgttctgcg	cgcggcctgg	gagccgccgc	cgccgccgcc	360
tcagcgagag	gaggaatgca	ccggccgcgc	cgccgcggga	cgcgcccgcc	gctcctggcg	420
ctgctggccg	cgctgctgct	ggccgcacgc	ggggctgctg	cccaagaaac	agagctgtca	480
gtcagtgctg	aattagtgcc	tacctcatca	tggaacatct	caagtgaact	caacaaagat	540
tcttacctga	cccttgatga	accaatgaat	aacatcacca	cgtctctggg	ccagacagca	600
gaactgcact	gcaaagtctc	tgggaatcca	cctcccacca	tccgctggtt	caaaaatgat	660
gctcctgtgg	tccaggagcc	ccggaggctc	tcctttcggt	ccaccatcta	tggctctcgg	720
ctgcggatta	gaaacctcga	caccacagac	acaggctact	tccagtgcgt	ggcaacaaac	780
ggcaaggagg	tggtttcttc	cactggagtc	ttgtttgtca	agtttggccc	ccctcccact	840
gcaagtccag	gatactcaga	tgagtatgaa	gaagatggat	tctgtcagcc	atacagaggg	900
attgcatgtg	caagatttat	tggcaaccgc	accgtctata	tggagtcttt	gcacatgcaa	960
ggggaaatag	aaaatcagat	cacagctgcc	ttcactatga	ttggcacttc	cagtcactta	1020
tctgataagt	gttctcagtt	cgccattcct	tccctgtgcc	actatgcctt	cccgtactgc	1080
gatgaaactt	catccgtccc	aaagccccgt	gacttgtgtc	gcgatgaatg	tgaaatcctg	1140
gagaatgtcc	tgtgtcaaac	agagtacatt	tttgcaagat	caaatcccat	gattctgatg	1200
aggctgaaac	tgccaaactg	tgaagatctc	ccccagccag	agagcccaga	agctgcgaac	1260
tgtatccgga	ttggaattcc	catggcagat	cctataaata	aaaatcacaa	gtgttataac	1320
agcacaggtg	tggactaccg	ggggaccgtc	agtgtgacca	aatcagggcg	ccagtgccag	1380
ccatggaatt	cccagtatcc	ccacacacac	actttcaccg	cccttcgttt	cccagagctg	1440
aatggaggcc	attcctactg	ccgcaaccca	gggaatcaaa	aggaagctcc	ctggtgcttc	1500
accttggatg	aaaactttaa	gtctgatctg	tgtgacatcc	cagcttgcga	ttcaaaggat	1560
tccaaggaga	agaataaaat	ggaaatcctg	tacatactag	tgccaagtgt	ggccattccc	1620
ctggccattg	ctttactctt	cttcttcatt	tgcgtctgtc	ggaataacca	gaagtcatcg	1680
tcggcaccag	tccagaggca	accaaaacac	gtcagaggtc	aaaatgtgga	gatgtcaatg	1740
ctgaatgcat	ataaacccaa	gagcaaggct	aaagagctac	ctctttctgc	tgtacgcttt	1800
atggaagaat	tgggtgagtg	tgcctttgga	aaaatctata	aaggccatct	ctatctccca	1860
ggcatggacc	atgctcagct	ggttgctatc	aagaccttga	aagactataa	caacccccag	1920
caatggatgg	aatttcaaca	agaagcctcc	ctaatggcag	aactgcacca	ccccaatatt	1980
gtctgccttc	taggtgccgt	cactcaggaa	caacctgtgt	gcatgctttt	tgagtatatt	2040
aatcaggggg	atctccatga	gttcctcatc	atgagatccc	cacactctga	tgttggctgc	2100
agcagtgatg	aagatgggac	tgtgaaatcc	agcctggacc	acggagattt	tctgcacatt	2160
gcaattcaga	ttgcagctgg	catggaatac	ctgtctagtc	acttctttgt	ccacaaggac	2220
cttgcagctc	gcaatatttt	aatcggagag	caacttcatg	taaagatttc	agacttgggg	2280
ctttccagag	aaatttactc	cgctgattac	tacagggtcc	agagtaagtc	cttgctgccc	2340
attcgctgga	tgccccctga	agccatcatg	tatggcaaat	tctcttctga	ttcagatatc	2400
tggtcctttg	gggttgtctt	gtgggagatt	ttcagttttg	gactccagcc	atattatgga	2460
ttcagtaacc	aggaagtgat	tgagatggtg	agaaaacggc	agctcttacc	atgctctgaa	2520
	ccagaatgta					2580
	ttaaagatat					2640
	ctactccttc					2700
	gtaatctcag					2760
	agggccagat					2820
ttcattccca	tcaatggata	cccaatacct	cctggatatg	cagcgtttcc	agctgcccac	2880

tacca	agccaa	caggtcctcc	cagagtgatt	cagcactgcc	cacctcccaa	gagtcggtcc	2940
ccaa	gcagtg	ccagtgggtc	gactagcact	ggccatgtga	ctagcttgcc	ctcatcagga	3000
tccaa	atcagg	aagcaaatat	tcctttacta	ccacacatgt	caattccaaa	tcatcctggt	3060
ggaat	tgggta	tcaccgtttt	tggcaacaaa	tctcaaaaac	cctacaaaat	tgactcaaag	3120
caage	catctt	tactaggaga	cgccaatatt	catggacaca	ccgaatctat	gatttctgca	3180
gaact	tgtaaa	atgcacaact	tttgtaaatg	tggtatacag	gacaaactag	acggccgtag	3240
		tattcaaatg					3300
caagi	tacctt	ctgtgaagtt	tcactgtgtc	ttaccaagca	ggacagacac	tcggccag	3358
_		_					
<210: <211:	> 450	5					
<212 <213	> Hom	o sapiens					
<400: qtqa	> 135 ctqtqa	5 ggactgtgga	taacctgctg	gaggtgtctg	cccggcaccc	ccagcgcctg	60
		gcttcgtgtc					120
		gagtccgagc					180
_		gacatttgga					240
		cagaggaaga					300
		caaatccctc					360
_		gcatccttgg					420
ccca	tgggac	atgtcatagc	cttggtttag				450
.01.0	. 135	_					
<210 <211 <212 <213	> 135 > 735 > DNA						
		o sapiens					
<400 gagt	> 135 ctgccc	ttgcgagctc	agagtgtgcc	cgtgcgccgc	cgccgtcgta	cctgccgccg	60
ccgc	caccgc	caccatgccc	aacttcgccg	gcacctggaa	gatgcgcagc	agcgagaatt	120
tcga	cgagct	gctgaaggca	ctgggtgtga	acgccatgct	gaggaaagtg	gccgtagcgg	180
ctgc	gtccaa	gccgcacgtg	gagatccgcc	aggacgggga	tcagttctac	atcaagacat	240
ccac	caccgt	gcgcaccact	gagatcaact	tcaaggtcgg	agaaggcttt	gaggaggaga	300
ccgt	ggacgg	acgcaagtgc	aggagtttag	ccacttggga	gaatgagaac	aagatccact	360
gcac	ccaaac	tcttcttgaa	ggggacggcc	ccaaaaccta	ctggacccgt	gagctggcca	420
acga	tgaact	tatcctgacg	tttggcgccg	atgacgtggt	ctgcaccaga	atttatgtcc	480
ggga	atgaag	gcagctggct	tgctcctact	ttcaggaagg	gatgcaggtc	cccgaggaat	540
atgt	catagt	tctgagctgc	cagtggaccg	cccttttccc	ctaccaatat	taggtgatcc	600
cgtt	ttcccc	atgacaatgt	tgtagtgtcc	cccaccccca	ccccctggc	cttggtgcct	660
cttg	tatccc	tagtgctgca	tagcccggca	tttgcacggt	ttcgaagtca	ttaaactggt	720
taga	.cgtgtc	tcaaa					735
<210	> 135	7					
<210 <211 <212 <213	> 135 > 833 > DNA > Hom						
<400	> 135	o sapiens 7					
cāga	áattáť	'ccagcaaatc	tatcatggat	cctaatcaga	acgtgaaatg	caagatagtt	60
		acagtcagtg					120
		attacgttcc					180
		tagagttgag					240
		cttaccctga					300
		acagtgtcct					360
acca	.aaatgc	tcttggtcgg	ctgcaagtct	gatctgcgga	cagatgttag	tacattagta	420
gagc	tctcca	atcacaggca	gacgccagtg	tcctatgacc	agggggcaaa	tatggccaaa	480

cagattggag cagctactta t	tatcqaatqc	tcagctttac	agtcggaaaa	tagcgtcaga	540
gacatttttc acgttgccac c					600
aacaaatcac agagagccac a					660
gcagttgcta cggacttacg a					720
cattatcttt aatgaagaca a					780
agtctaaatg aagtgcacag o					833
	3	3	55 55 5	3 3	
<210> 1358 <211> 2512					
<212> DNA <213> Homo sapiens					
<400> 1358					
caatgcactg acggatatga g					60
tgtgacattg tcccagacgc t					120
tacctctgcc ttccgaaaac a	agcccagatt	attgtcaata	atgaacagcc	tcagcaggaa	180
acacaaccag cagaaggaac o					240
gcaaccagtg gagtgttgcc					300
cctgaaatgc agactggccg a					360
cgcattccct ccaacccttc	ccaccgtatc	cagtgtgcag	caggctacga	gcaaagtgaa	420
cacaacgtgt gccaagacat a	agacgagtgc	actgcaggga	cgcacaactg	tagagcagac	480
caagtgtgca tcaatttacg	gggatccttt	gcatgtcagt	gccctcctgg	atatcagaag	540
cgaggggagc agtgcgtaga (	catagatgaa	tgtaccatcc	ctccatattg	ccaccaaaga	600
tgcgtgaata caccaggctc a	attttattgc	cagtgcagtc	ctgggtttca	attggcagca	660
aacaactata cctgcgtaga t	tataaatgaa	tgtgatgcca	gcaatcaatg	tgctcagcag	720
tgctacaaca ttcttggttc a	attcatctgt	cagtgcaatc	aaggatatga	gctaagcagt	780
gacaggetea aetgtgaaga o	cattgatgaa	tgcagaacct	caagctacct	gtgtcaatat	840
caatgtgtca atgaacctgg	gaaattctca	tgtatgtgcc	cccagggata	ccaagtggtg	900
agaagtagaa catgtcaaga t	tataaatgag	tgtgagacca	caaatgaatg	ccgggaggat	960
gaaatgtgtt ggaattatca t	tggcggcttc	cgttgttatc	cacgaaatcc	ttgtcaagat	1020
ccctacattc taacaccaga g	gaaccgatgt	gtttgcccag	tctcaaatgc	catgtgccga	1080
gaactgcccc agtcaatagt o	ctacaaatac	atgagcatcc	gatctgatag	gtctgtgcca	1140
tcagacatct tccagataca g	ggccacaact	atttatgcca	acaccatcaa	tacttttcgg	1200
attaaatctg gaaatgaaaa t	tggagagttc	tacctacgac	aaacaagtcc	tgtaagtgca	1260
atgcttgtgc tcgtgaagtc a	attatcagga	ccaagagaac	atatcgtgga	cctggagatg	1320
ctgacagtca gcagtatagg g	gaccttccgc	acaagctctg	tgttaagatt	gacaataata	1380
gtggggccat tttcatttta g	_				1440
aagaatattg ttaccttaaa g	_	_			1500
tctatactgt acactcaccc a					1560
tatgtaaaga ttcaaagttt g	_	_	_		1620
actggtcttc ttcaagagag o	_				1680
taaaagtggg accaagcaat g	_				1740
cactaacagt ctcataagga g					1800
atgagttttt aactgctttg t	-		_	_	1860
aaaatgggga tctgccatat t			_		1920
tgtttattat atagtaataa a		_			1980
taattttgtc agaaatttta g					2040
cagaattccc aaaatgaacc a					2100
ggaggatatg agaaaataaa t					2160
ctcggaaaat ataataacat c					2220
taaaaggtat ttcactggag a	aagttttaat	ttctaagtaa	aatttaaatc	ctaacacttc	2280

actaatttat aactaaaatt					2340
tgatggtttt tattcctggc	atccagagtg	acagtgaact	taagcaaatt	accctcctac	2400
ccaattctat ggaatatttt	atacgtctcc	ttgtttaaaa	tctgactgct	ttactttgat	2460
gtatcatatt tttaaataaa	aataaatatt	cctttagaag	atcactctaa	aa	2512
<210× 1359					
<210> 1359 <211> 1673 <212> DNA					
<213> Homo sapiens					
<400> 1359 attcccccgc aggccgggca	tagatagaga	caccaaaaca	tracqatqaq	caccetagae	60
agcccggtcc gggcctacga					120
ggcaagggcg agatcctggc					180
					240
ccggcgggca tcgactacaa					
cagctctggg atacttcagg					300
ggcgcacagg gtgtgatcct					360
gatcgatgga ttaaggagat					420
aaccgcctgc acctggcgtt					480
gagegeetgg gegtgaeett	ctttgaggtc	agccctctgt	gcaatttcaa	catcacagag	540
tcgttcacgg agctggccag	gatcgtgctg	ctgcggcatg	ggatggaccg	gctctggcgg	600
ccgagcaagg tgctgagctt	gcaagacctc	tgctgccggg	cggtcgtgtc	ctgcacgccg	660
gtgcacctgg tggacaagct	cccgctcccc	attgccttaa	gaagccacct	caagtccttc	720
tcgatggcca acggcctgaa	tgccaggatg	atgcacggcg	gttcctactc	cctcaccacc	780
agctccaccc acaaaaggag	cagcctccgc	aaagtgaagc	tcgtccgccc	ccccagagc	840
cccccaaaa actgcaccag	aaacagctgc	aaaatttctt	aaggaaggca	ctgaaagaaa	900
cacggcggaa tctctccagg	agaagctcgg	cgttaccccc	ggcagctggt	ggatgcatct	960
cagatecegg ttectetegg	cgaatgctgc	ttgcgaatgt	gtgcgacgcc	ttccgtgtga	1020
tggaaacaca ctaccccgtc	ggacttcgaa	tttctacgtg	gatgtgcatg	aagctcttgt	1080
tttcgatgtg tgtttgtaaa	gggaaaatta	gtactctgct	cgactcttgg	taacatgaaa	1140
ttctgaatgt tactttatca					1200
gtaagaacgg tgatattgga					1260
agcgggataa tttagagtca					1320
aatgtcaaag caccaattta					1380
tccagtttgt gtatgaaatg					1440
gattaataag tgatttatat					1500
ttctacaagt tatgaagcta					1560
acagccagca cagtttcgac					1620
acacttattt aggaaaatgt					1673
acacccaccc aggaaaacgc	ccccaacaa	cadadogoao	agoogoooo		20,0
<210> 1360 <211> 3505					
<212> DNA <213> Homo sapiens					
<400> 1360	gatagagaga	aat aaaaa at	cataataata	ctcttctcc	60
cgccgcctgc ccgcccgccc					120
attgcagttg aacccagcag					180
tgtggcagga gggcggcggc					240
agtattgata acaccaagga					
ccagacacta cagaagaagt					300
catgtgatgg caaagcattc					360 430
aacatggtgt cccacacgga					420
gaaaagggta gcagcgagca					480
agtaaagaag gggctgggga	acagaagacg	gagcacatga	ccagaacctg	ccggggagtg	540

```
atgegggetg ggeetggtgg ceaaagtgee teetaeteaa gggggaettg gatetggage
                                                                      600
tggtgctgct gtgtaaggag aagcccacaa ccggccctcc tggacaaggt ggccgacaac
                                                                      660
ctggccatcc agcttgctgc tgtaacagaa gacaagtacg aaatactgca atctgtcgac
                                                                      720
gatgctgcga ttgtgataaa aaacacaaaa gagcctccat tgtccctgac catccacctg
                                                                      780
acatcccctg ttgtcagaga agaaatggag aaagtattag ctggagaaac gctatcagtc
                                                                      840
                                                                      900
aacgaccccc cggacgttct ggacaggcag aaatgctttg ctgccttggc gtccctccga
cacgccaagt ggttccaggc cagagccaac gggctgaagt cttgtgtcat tgtgatccgg
                                                                      960
gtettgaggg acetgtgeae tegegtgeee acetggggte eecteegagg etggeetete
                                                                     1020
gageteetgt gtgagaaate cattggeaeg geeaacagae egatgggtge tggegaggee
                                                                     1080
ctgcggagag tgctggagtg cctggcgtcg ggcatcgtga tgccagatgg ttctggcatt
                                                                     1140
tatgaccett gtgaaaaaga agecaetgat getattggge atetagacag acageaacgg
                                                                     1200
gaagatatca cacagagtgc gcagcacgca ctgcggctcg ccgcgttcgg ccagctccat
                                                                     1260
aaagteetag geatggaeee tetgeettee aagatgeeea agaaaeeaaa gaatgaaaae
                                                                     1320
                                                                     1380
ccagtggact acaccgttca gatcccacca agcaccacct atgccattac gcccatgaaa
cgcccaatgg aggaggacgg ggaggagaag tcgcccagca aaaagaagaa gaagattcag
                                                                     1440
aagaaagagg agaaggcaga gcccccccag gctatgaatg ccctgatgcg gttgaaccag
                                                                     1500
ctgaagccag ggctgcagta caagctggtg tcccagactg ggcccgtcca tgcccccatc
                                                                     1560
tttaccatgt ctgtggaggt tgatggcaat tcattcgagg cctctgggcc ctccaaaaag
                                                                     1620
acggccaage tgcacgtggc cgttaaggtg ttacaggaca tgggcttgcc gacgggtgct
                                                                     1680
gaaggcaggg actcgagcaa gggggaggac teggetgagg agaccgagge gaagccagca
                                                                     1740
gtggtggccc ctgccccagt ggtagaagct gtctccaccc ctagtgcggc ctttccctca
                                                                     1800
gatgccactg ccgagaacgt aaaacagcag gggccgatcc tgacaaagca cggcaagaac
                                                                     1860
                                                                     1920
ccagtcatgg agctgaacga gaagaggcgt gggctcaagt acgagctcat ctccgagacc
gggggcagcc acgacaagcg cttcgtcatg gaggtcgaag tggatggaca gaagttccaa
                                                                     1980
ggtgctggtt ccaacaaaa ggtggcgaag gcctacgctg ctcttgctgc cctagaaaag
                                                                     2040
cttttccctg acacccctct ctcgcccttg atgccaacaa aaagaagaga gccccagtac
                                                                     2100
ccgtcagagg gggaccgaaa tttgctgcta agccacataa ccctggcttc ggcatgggag
                                                                     2160
gccccatgca caacgaagtg cccccaccc ccaaccttcg agggcgggga agaggcggga
                                                                     2220
cgatccgggg acgaggcgc gggcgaggat ttggtggcgc caaccatgga ggctacatga
                                                                     2280
                                                                     2340
atgccggtgc tgggtatgga agctatgggt acggaggcaa ctctgcgaca gcaggctaca
gtcagttcta cagcaacgga gggcattctg ggaatgccag tggcggtggc ggcgggggcg
                                                                     2400
gtggtggctc ctccggctat ggctcctact accaaggtga caactacaac tcaccggtgc
                                                                     2460
ccccaaaaca cgctgggaag aagcagccgc acgggggcca gcagaagccc tcctacggct
                                                                     2520
egggetacca gteccaecag ggecagcage agtectacaa ecagageece tacagcaact
                                                                     2580
atggccctcc acagggcaag cagaaaggct ataaccatgg acaaggcagc tactcctact
                                                                     2640
cgaactccta caactctccc gggggcgggc gcggatccga ctacaactac gagagcaaat
                                                                     2700
tcaactacag tggtagtgga ggccgaagcg gcgggaacag ctacggctca ggcggggcat
                                                                     2760
cctacaaccc agggtcacac gggggctacg gcggaggttc tggggggggc tcctcatacc
                                                                     2820
aaggcaaaca aggaggctgc tcacagtcga actacagctc ccggggtccg gccagaacta
                                                                     2880
cagtggccct cccagctcct accagtcctc acaaggcggc tatggcagaa acgcagacca
                                                                     2940
cagcatgaac taccagtaca gataagcccc gcgcggagat ttctaccttc tgcacttact
                                                                     3000
ececateaga agategagtt ttatgeatea eagttaacat gteagetgee tgegeteeag
                                                                    3060
gcccccgccc ccatcccgtc cacgttgctg tgtcgtgagg tgcagcgggt caccctgtgg
                                                                    3120
ecegteetgt gacceatatt tageegtgtt tgggacteeg tgtetteaat ggtttgttag
                                                                    3180
ttgccattac aactttgtct gggtagagtt tttgagtttt tgcagttcag tatccctctg
                                                                    3240
tctattcaca cttcgtgtta gtggtaactc agtttgtctt taaatagtta cagaagggat
                                                                    3300
acgtcatttg ttaatgcttt ttgttgaagt gagttaaacg agcttttctg tattttaatg
                                                                    3360
```

ctttagtgtt	tcagttttat	aagtgaagat	tttattttaa	aaaccagtgg	gaaagagtgg	3420
ggggtttctt	tttatgtctg	ggtcattcag	gcagtacatc	tgaattaagc	tgaatgtaga	3480
caaataaaga	aaaacaaaac	tgaaa				3505
<210> 1361 <211> 2330 <212> DNA <213> Homo	sapiens					
<400> 1361 aaaggaccga	l ggcgtgcagc	ggacagcaga	tggatcccgc	ggccagcagc	tgcatgagga	60
gcctccagcc	cccagcccct	gtctggggct	gccttcgaaa	ccccactcg	gaaggcaatg	120
gggcctcagg	gctaccccac	tacccgccca	ccccgttctc	cttccaccag	aaaccagact	180
tcctggcgac	agcgacggca	gcgtaccctg	acttctcagc	ctcctgcctg	gcagccaccc	240
cacacagcct	gccccaggag	gagcacatct	tcactgagca	gcaccccgct	ttcccacagt	300
ccccaactg	gcacttccct	gtctcagacg	cccggcgcag	gcccaactca	ggcccggcag	360
ggggttccaa	ggaaatgggg	accagcagcc	tgggcctggt	ggacaccaca	ggaggcccag	420
gcgatgacta	cggggtgctt	gggagcactg	ccaatgagac	agagaagaaa	tcatccaggc	480
ggagaaagga	gagttcagac	aaccaggaga	acagagggaa	gccggagggc	agcagcaaag	540
cccgcaagga	gaggacggcc	ttcaccaagg	agcagctgcg	agagctggag	gcagagtttg	600
cccatcataa	ctacctgact	cggctccgca	gatatgagat	tgcggtaaac	ctggacctct	660
ctgagcgcca	ggtcaaagtg	tggttccaga	accgaaggat	gaagtggaag	cgtgtgaagg	720
gaggtcagcc	catctcccc	aatgggcagg	accctgagga	tggggactcc	acagcctctc	780
caagttcaga	gtgagattct	gcatggagga	aaaatgacta	aggactgagc	cccctaccca	840
actaccccca	ccccaatccc	accttcaccc	tcttccttcc	ccagccaggg	cagcctctcc	900
acatctttcc	ctgactcttg	gatatgaaac	tgcccagcat	tcctgggagt	cttaggattt	960
tctaggaagt	tctgtccagc	ctcttagcag	cctcttccct	agggcctttg	ctcccacact	1020
ctcatggaat	cagacagaga	tcctaccggg	ccggatgaat	ctggaaacag	cttcagagat	1080
actgcttctc	agcgtctctt	ggctgccacc	catgcctcct	cctaccgctg	ttctcctagg	1140
tcagccaggc	ctcctcctgg	tctggacacc	acctggcctg	gtgggagagg	agctttggaa	1200
ccagctggcg	actcggaaag	taaatgcttc	aaaaggaagg	aaatgacaga	gacacacgcc	1260
cttgcccacc	ttcctctgta	ggctgcacat	ctgaggcttt	ggggcccctt	agttgtcccg	1320
aaaccccaag	aaaaatcaga	atgaggagag	tcaaggacag	caactcagct	gctgcaagcc	1380
agaaacacat	ccctgtctcc	aaatttgttg	gctaagtgga	gacacttctg	agaactgact	1440
agagaagaca	agaaaatagc	ccgatgtagg	tttcggtgtc	cccatatagg	ccccgtccac	1500
acaggcttga	ctgggtggac	aagaatgaac	ccatgacagc	acctgctgct	tcaaaatcaa	1560
aatcaattta	gggatacagc	aggggctgtt	gggctgtgct	ccagagaaaa	ggagcagcta	1620
ctccttttaa	atccacgatt	tctggattga	aaacctgtcc	agatgctgag	ttgttgggct	1680
gaacaactag	gagctgaaaa	caacgtagag	gctggaaagt	gtcccctgca	ttctggaggg	1740
gaggggagat	aataaggagg	gctgctgggt	gagggcctgg	agatgtggaa	ccctggagtg	1800
gaaggtttct	ccagtgacag	tgtcctgtga	cwgcaaaagg	grasaagaaa	atccctcttc	1860
ctccatggga	tggatttaag	ctcttgctgt	${\tt gtgttctaca}$	aatgctgtta	ttgtgggagg	1920
aaatgctagg	tttttgtgtg	tggactgccc	agacctcagc	caggtcttct	ggagatgaca	1980
tttgaggact	gatggccaaa	gagcatgggg	gactgaagcc	ctggctgcct	cagcgctctg	2040
tctcccaaca	ccagctggtg	ttgcagaggg	aggtcaacgt	gagtttggat	ctcttgtacg	2100
cagatgtaat	cattcacatg	taaaaataac	cccacctccc	caccccaaaa	agggcaagag	2160
ctgtggaaaa	tgattgccaa	atgagatggc	tggttagagc	atgattttt	ctaaagcata	2220
cttcatatat	tttcttaaga	ttacatcaag	ctaattgtgc	gagctcaatt	cactttgtaa	2280
gaaaactctc	ggagaaataa	aatcaataaa	aagccaaaaa	aaaaaataag		2330
040 406						

<210> 1362 <211> 2156 <212> DNA

## <213> Homo sapiens $^{<400>}\,\,$ 1362 ttegtgettt geggegggeg eeggegetgg eggeegtgee gggaggaaaa eeaattetgt 60 gtcctcggag gaccacagcc cagttgggcc ccaggcgaaa cccagcctgg agcttgcagg 120 caggacgact gttcagcacg cagaccgccg aggacaagga ggaacccctg cactcgatta 180 240 tcagcagcac agagagcgtg cagggttcca cttccaaaca tgagttccag gccgagacaa agaagetttt ggacattgtt geeeggteee tgtacteaga aaaagaggtg tttataeggg 300 agetgatete caatgecage gatgeettgg aaaaaetgeg teacaaactg gtgtetgaeg 360 gccaagcact gccagaaatg gagattcact tgcagaccaa tgccgagaaa ggcaccatca 420 480 ccatccagga tactggtatc gggatgacac aggaagagct ggtgtccaac ctggggacga ttgccagatc ggggtcaaag gccttcctgg atgctctgca gaaccaggct gaggccagca 540 gcaagatcat cggccagttt ggagtgggtt tctactcagc tttcatggtg gctgacagag 600 tggaggteta ttecegeteg geageceegg ggageetggg ttaceagtgg ettteagatg 660 720 gttctggagt gtttgaaatc gccgaagctt cgggagttag aaccgggaca aaaatcatca tccacctgaa atccgactgc aaggagtttt ccagcgaggc ccgggtgcga gatgtggtaa 780 cgaagtacag caacttcgtc agcttcccct tgtacttgaa tggaaggcgg atgaacacct 840 tgcaggccat ctggatgatg gaccccaagg atgtcggtga gtggcaacat gaggagttct 900 960 accgctacgt cgcgcaggct cacgacaagc cccgctacac cctgcactat aagacggacg caccgctcaa catccgcagc atcttctacg tgcccgacat gaaaccgtcc atgtttgatg 1020 1080 tgagccggga gctgggctcc agcgttgcac tgtacagccg caaagtcctc atccagacca aggecaegga cateetgeee aagtggetge getteateeg aggtgtggtg gaeagtgagg 1140 acattcccct gaacctcagc cgggagctgc tgcaggagag cgcactcatc aggaaactcc 1200 gggacgtttt acagcagagg ctgatcaaat tcttcattga ccagagtaaa aaagatgctg 1260 agaagtatgc aaagtttttt gaagattacg gcctgttcat gcgggagggc attgtgaccg 1320 1380 ccaccgagca ggaggtcaag gaggacatag caaagctgct gcgctacgag tcctcggcgc tgccctccgg gcagctaacc agcctctcag aatacgccag ccgcatgcgg gccggcaccc 1440 1500 gcaacatcta ctacctgtgc gcccccaacc gtcacctggc agagcactca ccctactatg aggccatgaa gaagaaagac acagaggttc tcttctgctt tgagcagttt gatgagctca 1560 ccctgctgca ccttcgtgag tttgacaaga agaagctgat ctctgtggag acggacatag 1620 tegtggatea etacaaggag gagaagtttg aggacaggte eecageegee gagtgeetat 1680 cagagaagga gacggaggag ctcatggcct ggatgagaaa tgtgctgggg tcgcgtgtca 1740 ccaacgtgaa ggtgaccetc cgactggaca cccaccetge catggtcace gtgctggaga 1800 tgggggctgc ccgccacttc ctgcgcatgc agcagctggc caagacccag gaggagcgcg 1860 cacagetect geageceaeg etggagatea acceeaggea egegeteate aagaagetga 1920 atcactgcgc gcaagcgagc ctggcctggc tcagctgctg gtggatcaga tatacgagaa 1980 cgccatgatt gctgctggac ttgttgacga ccctagggcc atggtgggcc gcttgaatga 2040 gctgcttgtc aaggccctgg agcgacactg acagccaggg ggccagaagg actgacacca 2100 cagatgacag ccccacctcc ttgagcttta tttacctaaa tttaaaggta tttctt 2156 DNA Homo sapiens <400> 1363 ggcacgagtc gaagagetee tggacgcaga ggceetgeee ttgccagaeg gegcagaeat 60 gtcagaacaa agtaaggatc tgagcgaccc taactttgca gccgaggccc ccaactccga 120 ggtgcacagc agccctgggg tttcggaggg ggttcctccg tccgcgaccc tggcagagcc 180 gcagagecet cetetaggee egaeggeege teegcaggee gegeegeete eecaggeeee 240 gaacgacgag ggcgacccga aggccctgca gcaggctgcg gaggagggcc gcgcccacca 300 ggccccgagc gcggcccagc cgggcccggc accgccagcc ccggcgcagc tggtgcagaa 360 ggcgcacgag ctcatgtggt acgtgctggt caaggaccag aagaagatga tcatctggtt 420

```
tccagacatg gtgaaagatg tcatcggcag ctacaagaag tggtgcagga gcatcctccg
                                                                      480
gegeaceage eteatecteg eeegggtgtt egggetgeac etgaggetaa eeageetgea
                                                                      540
caccatggag titgegetgg tcaaageget ggageeegag gagetggaea gggtggeget
                                                                      600
gagcaaccgc atgcccatga caggcctcct gctcatgatc ctgagcctca tctacgtgaa
                                                                      660
gggccgcggc gccagagaga gcgccgtctg gaacgtgctg cgcatcctgg ggctgcggcc
                                                                      720
                                                                      780
ctggaagaag cactccacct tcggggacgt gcggaagctc atcactgagg agttcgtcca
                                                                      840
aatgaattac ctgaagtacc agegegteec ataegtggag eegeeegaat aegagttett
                                                                      900
ttggggctcc cgggccagcc gcgaaatcac caagatgcaa atcatggagt tcctggccag
ggtctttaag aaagaccccc aggcctggcc ctcccgatac agagaagctc tggaggaggc
                                                                      960
                                                                     1020
cagagetetg egggaggeta ateceaetge ceaetaceet egeageagtg tetetgagga
ctagcaaagt ctggaggcag atgaatggtt tctgaccctc accagggctg tggaagggtg
                                                                     1080
ggggtgggtc attatagtat tcaggattta cagtgcagta ttcacgtgta acttttaagt
                                                                     1140
tttcagtaca gtgcttttat acctttaatg caatgttgta ttcatttggg tactattgtg
                                                                     1200
tagtatttag gatgtatgca tgtttgttta tatgtaagct tggttggtgc tttcgctttt
                                                                     1260
gtgctacctt tcttggattt ttgtaccaga gatgtgctaa actgatgaaa tacattgaga
                                                                     1320
aagtttecat ettattettt tatatgggae tgatgatgtg tgttggggta gaetgeteet
                                                                     1380
gcagagtttg gaagaagtca ccagcaaagc cggcctaacc aagaaaagtc aaggcccttc
                                                                     1440
atgaccttgc tgggcacaga aaacaccctc gtggagtaca ctaatttgaa ctggactggt
                                                                     1500
ctcagtgtga gcacttggca cactttacta aacacatata caaccccacc gtgagtcaac
                                                                     1560
tttaaagtaa acattaaaga ttcttgtgat ac
                                                                     1592
       DNA
Homo sapiens
<400> 1364
ctgccaatga gctccgccga gtagcaccgg ggcagggcta gcgcttaaag gagccgcgac
                                                                       60
ccctttgcag accagaggt gacccggatg atggcggccg gcgcggccct agccctggcc
                                                                      120
ttgtggctac taatgccacc agtggaggtg ggagggggg ggcccccgcc aatccaggac
                                                                      180
ggtgagttca cgttcctgtt gccggcgggg aggaagcagt gtttctacca gtccgcgccg
                                                                      240
gccaacgcaa gcctcgagac cgaataccag gtgatcggag gtgctggact ggacgtggac
                                                                      300
ttcacgctgg agagccctca gggcgtgctg ttggtcagcg agtcccgcaa ggctgatggg
                                                                      360
                                                                      420
gtacacacgg tggagccaac ggaggccggg gactacaagc tgtgctttga caactccttc
agcaccatct ccgagaagct ggtgttcttt gaactgatct ttgacagcct ccaggatgac
                                                                      480
gaggaggtcg aaggatgggc agaggctgtg gagcccgagg agatgctgga tgttaaaatg
                                                                      540
gaggacatca aggagtecat tgagaccatg eggaceegge tggagegeag catecagatg
                                                                      600
ctcacgctac tgcgggcctt cgaggcacgt gaccgcaacc tgcaagaggg caacttggag
                                                                      660
egggteaact tetggteage tgteaacgtg geggtgetge tgetggtgge tgtgetgeag
                                                                      720
gtctgcacgc tcaagcgctt cttccaggac aagcgcccgg tgcccacgta gcccctgcca
                                                                      780
tggaaggaag aacgggacaa aggaggggca gcagggtgtg tgcatatgag acttgggggt
                                                                      840
ccctccccaa ttttagtttc ctgccaaaac gggagtgtgc agtcagggcc tgcggtctgg
                                                                      900
ccccatgagt ctccttccgt cctcagcggg cagggaacac ctctggcttg tagaagggac
                                                                      960
ggctcagtgg ctgcaccgac ggtcctggaa atctcacatg gtgggcactg cagcgttgga
                                                                     1020
acgtgageet eggattteet ggeeeeteta etgtaaatgt geettageet aageeteeea
                                                                     1080
tectgtgtta gegttgeetg gtgeggggea gggeetaaca aggaaacetg ggeeeteeaa
                                                                     1140
gccaggttga ggtctggtaa cagaatgcca ggaaggggc ctggaagacc acctgccccg
                                                                     1200
gcccetetee tgcaggggce ccacacagge atgagggatg gcccggccaa agtetaggca
                                                                     1260
gaagcctcct ataacaaagg gtggtgtggc ctgggcattg gag
                                                                     1303
```

<210> 1365 <211> 662

<212> DNA <213> Homo sapiens	
-	
<400> 1365 ccccagccat ggagcaagac aacagccccc gaaagatcca gttcacggtc ccgctgctgg	60
ageegeacet tgaeeeegag geggeggage agatteggag gegeegeeee acceetgeea	120
ccctcgtgct gaccagtgac cagtcatccc cagagataga tgaagaccgg atccccaacc	180
cacateteaa gteeaetttg geaatgtege caeggeaaeg gaagaagatg acaaggatea	240
cacccacaat gaaagagctc cagatgatgg ttgaacatca cctggggcaa cagcagcaag	300
gagaggaacc tgaggggcc gctgagagca caggaaccca ggagtcccgc ccacctggga	360
tcccagacac agaagtggag tcaaggctgg gcacctctgg gacagcaaaa aaaactgcag	420
aatgcatccc taaaactcac gagagaggca gtaaggaacc cagcacaaaa gaaccctcaa	480
cccatatacc accactggat tccaagggag ccaactcggt ctgagagagg aggaggtatc	540
ttgggatcaa gactgcagtt tgggaatgca tggacaccgg atttgtttct tattccttca	600 660
cttttgggga aaatctcttg tttttaaaaa gtgataaatt tggtgttagg tcaaaaaaaa	662
aa	002
<210> 1366 <211> 1234	
<212> DNA <213> Homo sapiens	
<400> 1366	
cgctgctctt ggttctggtt ctggaggctg ggttgagagg tcgccggtcc gactgtcctc	60
ggcggttggt cagtgtgaat ttgtgacagc tgcagttgct ccccgccccc gagcagccga	120
ggagtctacc atggctcaag aatctcccaa aaattcagca gcagaaattc cagtgactag	180
taatggagaa gttgatgat ctcgtgaaca tagctttaat agggatttga agcattcatt	240 300
accatctgga cttggtctct cagaaaccca aattacatct catggctttg acaataccaa agagggtgtt attgaagcag gagcatttca aggtggccag agaacacaga caaaaagtgg	360
accagttatt ctagcagatg aaattaaaaa teetgeaatg gaaaagttag aacttgttag	420
aaaatggagt ctaaacacct ataagtgtac tcgacagatt atctctgaga agctaggccg	480
tggctcaaga actgtggacc ttgaacttga agctcagatt gatatattaa gggataacaa	540
gaaaaaatat gaaaatattt taaaactggc tcaaacattg tcgacccagc ttttccagat	600
ggtacatacc caaaggcaac ttggagatgc atttgctgac ctgagtttga agtcactaga	660
acttcatgaa gaatttggct ataatgccga tacccagaaa ctgctggcta aaaatggaga	720
gactettett ggggeeatta atttttteat tgetagtgtg aacaetttgg tgaataaaac	780
cattgaagat acattaatga ctgtgaaaca gtatgaaagt gccaggattg aatatgatgc	840
atatcgcact gatttggaag aactgaatct tggaccacgt gacgcaaaca ctctgccaaa	900
gattgagcag tcacagcatc tcttccaagc acataaggaa aaatatgata aaatgcgcaa	960
tgatgtttct gtcaaattga aatttctaga agaaaataag gttaaagtat tgcacaatca	1020
gctggtcctt ttccacaatg ccattgccgc ttactttgct gggaatcaga agcagcttga	1080
acagacactt aaacagttcc atatcaaatt gaaaacccct ggagtggatg ccccatcttg	1140
gcttgaagaa cagtaaaatc acagcggaaa ataaaaagaa agtcgcgttg ttatatttct	1200 1234
aaaccaacct aacaagaatt aagcagagtt gggc	1234
<210> 1367 <211> 853	
<210> 1367 <211> 853 <212> DNA <213> Homo sapiens	
<400> 1367	
agtggcaccg ctgactgccg agaggaagct cgcctctgcc cggctgccct cttgtagtcc	60
gccggcgagg ggcagttete ggtgaggagg aagagagcag cggacggcae agcacccgcg	120
egggeeetee cacaacaget ecagetggea geateactte eegecaattt atecaactte	180
tgccaagget etgaaatgee aacaacgteg aggeetgeac ttgatgteaa gggtggeace	240 300
tcacctgcga aggaggatgc caaccaagag atgagctccg tggcctactc caaccttgcg gtgaaagatc gcaaagcagt ggccattctg cactaccctg gggtagcctc aaatggaacc	360
gogaaagaco goaaagoago ggocaccoog caccaccoog gggcagococ aaacggaacc	500

<400>

1369

```
aaggccagtg gggctcccac tagttcctcg ggatctccaa taggctctcc tacaaccacc
                                                                       420
cctcccacta aacccccatc cttcaacctg caccccgccc ctcacttgct ggctagtatg
                                                                       480
cagctgcaga aacttaatag ccagtatcag gggatggctg ctgccactcc aggccaaccc
                                                                       540
ggggaggcag gacccctgca aaactgggac tttggggccc aggcgggagg ggcagaatca
                                                                       600
ctctctcctt ctgctggtgc ccagagccct gctatcatcg attcggaccc agtggatgag
                                                                       660
                                                                       720
gaagtgctga tgtcgctggt ggtggaactg gggttggacc gagccaatga gcttccggag
etgtggetgg ggeagaatga gtttgaette actgeggaet tteeatetag etgetaatge
                                                                       780
caagtgtccc taaagatgga ggaataaagc caccaattct gttgtaaata aaaataaagt
                                                                       840
tacttacaaa gag
                                                                       853
       1368
1842
DNA
Homo sapiens
<400> 1368 tacctcatcc acctcttcca tacctttaca ggcctctcaa ttgcttattt taactttgga
                                                                        60
aaccagetet accaetecet getgtgtatt gtgetteagt teeteateet tegaetaatg
                                                                       120
ggccgcacca tcactgccgt cctcactacc ttttgcttcc agatggccta ccttctqqct
                                                                       180
ggatactatt acactgccac cggcaactac gatatcaagt ggacaatgcc acattgtgtt
                                                                       240
ctgactttga agctgattgg tttggctgtt gactactttg acggagggaa agatcagaat
                                                                       300
teettgteet etgageaaca gaaatatgee ataegtggtg tteetteeet getggaagtt
                                                                       360
gctggtttct cctacttcta tggggccttc ttggtagggc cccagttctc aatgaatcac
                                                                       420
tacatgaagc tggtgcaggg agagctgatt gacataccag gaaagatacc aaacagcatc
                                                                       480
attectgete teaagegeet gagtetggge ettttetace tagtgggeta eacactgete
                                                                       540
agececeaca teacagaaga etateteete aetgaagaet atgacaacea eecettetgg
                                                                       600
ttccgctgca tgtacatgct gatctggggc aagtttgtgc tgtacaaata tgtcacctgt
                                                                       660
tggctggtca cagaaggagt atgcattttg acgggcctgg gcttcaatgg ctttgaagaa
                                                                       720
aagggcaagg caaagtggga tgcctgtgcc aacatgaagg tgtggctctt tgaaacaaac
                                                                       780
ccccgcttca ctggcaccat tgcctcattc aacatcaaca ccaacgcctg ggtggcccgc
                                                                       840
tacatettea aacgaeteaa gtteettgga aataaagaac teteteaggg tetetegttg
                                                                       900
ctattcctgg ccctctggca cggcctgcac tcaggatacc tggtctgctt ccagatggaa
                                                                       960
ttcctcattg ttattgtgga aagacagget gecaggetca ttcaagagag ceccaceetg
                                                                      1020
agcaagctgg ccgccattac tgtcctccag cccttctact atttggtgca acagaccatc
                                                                      1080
cactggetet teatgggtta etceatgaet geettetgee tetteaegtg ggacaaatgg
                                                                      1140
cttaaggtgt ataaatccat ctatttcctt ggccacatct tcttcctgag cctactattc
                                                                      1200
atattgcctt atattcacaa agcaatggtg ccaaggaaag agaagttaaa gaagatggaa
                                                                      1260
taatccattt ccctggtggc ctgtgcggga ctggtgcaga aactactcgt ctcccttttc
                                                                      1320
acagcactcc tttgccccag agcagagaat ggaaaagcca gggaggtgga agatcgatgc
                                                                      1380
ttccagctgt gcctctgctg ccagccaagt cttcatttgg ggccaaaggg gaaacttttt
                                                                      1440
tttggagaag gcgtcttgct ttgtcaccca cgctggaatg cagtggcggg atctcagctc
                                                                      1500
acegeaacet ceaceteetg ggtteaagtg atttteetge eteageetee caagtagetg
                                                                      1560
ggaatacagg cacgccacca tgcccagcta atttttgtat tttcagtaga aacgggattt
                                                                      1620
caccacgttg gccaggctgg tctcgaactc ctgaccgcaa gtgatccacc cgcctccgcc
                                                                      1680
teccaaagtg etgggattac aggegtgage cacegtgeee ggeecaaagg ggaaactett
                                                                      1740
gtgggaggag cagaggggct cacatetece etetgattee eccatgeaca ttgeettate
                                                                      1800
tctccccatc tagccaggaa tctattgtgt ttttcttctg cc
                                                                      1842
       DNA
Homo sapiens
```

```
60
ggctgtgcca ggtgcacatt tagcacccgt tgccttctct aggagccgct cctagcttgc
                                                                      120
cttatcacat ccacgtgacc cctcagagca cagcagcttc tgattctcca tcctattttc
ttctcttgac tgatacattt gggcacttct agggaattca gaaaccaagg gaagggggga
                                                                      180
agtgetgget tttgeteetg eecagetgaa aggettgaaa acagtteagt aattetggge
                                                                      240
aggtttctct ccttaaatta aaatccaata tgggcccctc tgtacttaac attccaaatg
                                                                      300
ctcattccaa acactttgcc aacgaaggca aacagtagag aagttaaata cagtgctgcc
                                                                      360
                                                                      420
cttgaggctc tccaagggaa aggcgaatga atattctcca ggccctctgc ttattcctct
ctgcctattg tgaaggcaat caggccagac tattgagggc atctggcagc aggactcagg
                                                                      480
                                                                      540
caggtatgaa gtagccagcc acaagtgtga aaaggaagag tgctgagaga aactgcctag
tcatgtgata tccctaatgc actgtgcttt cttccctcaa gaaccacccc ttctggttcc
                                                                      600
                                                                       660
gctgcatgta catgctgatc tggggcaagt ttgtgctgta caaatatgtc acctgttggc
tggtcacaga aggagtatgc attttgacgg gcctgggctt caatggcttt gaagaaaagg
                                                                       720
gcaaggcaaa gtgggatgcc tgtgccaaca tgaaggtgtg gctctttgaa acaaaccccc
                                                                      780
gcttcactgg caccattgcc tcattcaaca tcaacaccaa cgcctgggtg gcccggtgag
                                                                       840
ctgctggtgg ggagcctgga ccctggttcc ttccttccac tgtcttccca gattggaggg
                                                                       900
caggggtgta ccatgtcacc cctatgcgtc tttcccatct gggcagaacc ccctgtcgct
                                                                       960
cacactgact ttgaccccca cctatacccc
                                                                       990
      1370
1648
DNA
Homo sapiens
<400> 1370
tggccgacac ccgcagggac gcccgccgga cgagcacgcg gagggccctc gcctccacgg
                                                                       60
atgcaccatg ccggtgtgag gagcatctgt tcttcccact ctctgcagtt aacaaaccca
                                                                       120
acccaaacca ccacaggtgc tcctcctggg gagtttcctg tctgacaaat gccaggctca
                                                                      180
                                                                       240
cttcaaggag aatcacgctt ctttctaaag atggattcac catttaaaac agagctctgg
gageettteg geaaatettg aaagetgeac ggtgeagaga catggatgtg aetteecaag
                                                                      300
                                                                      360
eceggggegt gggeetggag atgtacceag geacegegea geetgeggee cecaacacea
cctccccga gctcaacctg tcccacccgc tcctgggcac cgccctggcc aatgggacag
                                                                      420
gtgagctctc ggagcaccag cagtacgtga tcggcctgtt cctctcgtgc ctctacacca
                                                                       480
tetteetett eeceategge tttgtgggea acateetgat eetggtggtg aacateaget
                                                                       540
tecgegagaa gatgaceate eeegaeetgt aetteateaa eetggeggtg geggaeetea
                                                                       600
                                                                      660
tcctggtggc cgactccctc attgaggtgt tcaacctgca cgagcggtac tacgacatcg
cegteetgtg cacetteatg tegetettee tgeaggteaa catgtacage agegtettet
                                                                      720
tecteacetg gatgagette gacegetaca tegecetgge cagggecatg egetgeagee
                                                                      780
tgttccgcac caagcaccac gcccggctga gctgtggcct catctggatg gcatccgtgt
                                                                      840
cagecaeget ggtgeeette acegeegtge acetgeagea caeegaegag geetgettet
                                                                      900
gtttcgcgga tgtccgggag gtgcagtggc tcgaggtcac gctgggcttc atcgtgccct
                                                                      960
                                                                     1020
tegecateat eggeetgtge tacteeetea ttgteegggt getggteagg gegeaeegge
acceptggget geggeeeegg eggeagaagg egeteegeat gateetegeg gtggtgetgg
                                                                     1080
tettettegt etgetggetg eeggagaaeg tetteateag egtgeaeete etgeagegga
                                                                     1140
egeageetgg ggeegeteee tgeaageagt ettteegeea tgeeeaeeee eteaegggee
                                                                     1200
acattgtcaa cctcaccgcc ttctccaaca gctgcctaaa ccccctcatc tacagctttc
                                                                     1260
teggggagae etteagggae aagetgagge tgtacattga geagaaaaca aatttgeegg
                                                                     1320
ccctgaaccg cttctgtcac gctgccctga aggccgtcat tccagacagc accgagcagt
                                                                     1380
eggatgtgag gttcagcagt geegtgtaga cageettgge egcataggee cageeagggt
                                                                     1440
gtgactcggg agctgcacac acctgggtgg acacaaggca cggccacgtc atgtctctaa
                                                                     1500
actgeggtea gatgtggett etggeteete ggggeetege gagggteaeg ettgeetggt
                                                                     1560
caccctgggg ctgcttaaga aacctcacga ctggtcacct tgcactcctc acacagaatt
                                                                     1620
```

```
DNA
Homo sapiens
<400> 1371 gtgatgccca tctcatatca gccagggaca aagcaactcc ttgttcatcc cagcttggct
                                                                      60
tttgatccgt gcccatgcct ggttcatgcc ttggacacat aggtttcctt taaagaggtg
                                                                     120
gtattgtagc cagcttatat ttgcatctat agccatgttt ctagtccagc ttggtgtgca
                                                                      180
atactagatg agttaataac tggtccttgt ttctgatctg gttcccattg tgtaactgtg
                                                                     240
ttgattggga aggtagtttg tgagccatga aatgcttggt tcattggttg cttattgacc
                                                                      300
tcattaacct aggacttgaa tatcccaaag ggtatgctct ttaccacatt caactcctaa
                                                                      360
tttatttgtt taggttatga tgtgattgct caagcccaat ctgggactgg gaaaacggcc
                                                                      420
acatttgcca tatcgattct gcagcagatt gaattagatc taaaagccac ccaggccttg
                                                                      480
gtcctagcac ccactcgaga attggctcag caggtaagag tggcttctat tccctccttc
                                                                      540
agggetgatt tagggatgat gagtataate caaggaeeag agaagtette tetgateace
                                                                      600
accttgggag gaagacatgg gtgccctaac actctcgaga cctgctgggt taattaaaag
                                                                      660
ctatttctta cccaaacgta accattgctt cctccaccca tttcctgagt caaatgggaa
                                                                      720
agctgttggg tgaagcctgg ctggctgggc aagtttgact gtgttctgaa taagcacctt
                                                                      780
cactatgggc taagagatcc cttggtgtgg gggtgatctt acagtagtca gagcagatgg
                                                                     840
acagteettt teaecettge ttaatageea gagetgttte atgeetgggg cacacacaat
                                                                      900
tctaatgctg gactttttcc tgggtcatgc tgcaacactg atgtcagagc atgtttttaa
                                                                      960
atgttctgtg gcaggggcag tgattattct gggtgtggat aatgtaagaa gttacagcag
                                                                     1020
agetecatte taaggeactt ggeteteagt titeteagag tgaacatgee tegtagettg
                                                                    1080
ggtcctatgg caggagtgca ataggacatg gatatgcatc acctgttcta taaaactggt
                                                                    1140
tgctggctgg gcgcggtggc tcaactcgta taatcccaac actttgggag gccaaggcag
                                                                    1200
gcagatetet tgagateagg agttggagae eageetggee aacatagtga aaceeegett
                                                                    1260
ctactaaaaa tacaaaaatt agccaggcat ggtggcgtgt gccttttatc ccagctactc
                                                                    1320
gggaagctca ggcaggagaa tttaacccag gaggtggagg ttgcagtgag ctgagattgt
                                                                    1380
1440
       1372
1529
DNA
Homo sapiens
^{<\!400>} 1372 cgggaagttg acgggcatca gtgaccccgt gactgtcaag acctccggct cgaggttcgg
                                                                      60
atcctggatg acagaccete tegeceetga aggegataac egggtgtggt acatggaegg
                                                                     120
ctatcacaac aaccgcttcg tacgtgagta caagtccatg gttgacttca tgaacacgga
                                                                     180
caatttcacc tcccaccgtc tcccccaccc ctggtcgggc acggggcagg tggtctacaa
                                                                     240
cggttctatc tacttcaaca agttccagag ccacatcatc atcaggtttg acctgaagac
                                                                     300
agagaccate etcaagacee geageetgga etatgeeggt tacaacaaca tgtaccaeta
                                                                     360
egectggggt ggecaetegg acategaeet catggtggae gagageggge tgtgggeegt
                                                                     420
gtacgccacc aaccagaacg ctggcaacat cgtggtcagt aggctggacc ccgtgtccct
                                                                     480
gcagaccctg cagacctgga acacgagcta ccccaagegc agegccgggg aggccttcat
                                                                     540
catctgcggc acgctgtacg tcaccaacgg ctactcaggg ggtaccaagg tccactatgc
                                                                     600
ataccagacc aatgeeteca ectatgaata categacate ecattecaga acaaataete
                                                                     660
ccacatetee atgetggaet acaaceecaa ggaeegggee etgtatgeet ggaacaaegg
                                                                     720
ccaccagate etetacaacg tgaccetett ecaegteate egeteegaeg agttgtaget
                                                                     780
ccctcctcct ggaagccaag ggcccacgtc ctcaccacaa aggaactcct gtgaaactgc
                                                                     840
tgccaaaaag ataccaataa cactaacaat accgatcttg aaaaatcatc agcagtgcgg
                                                                     900
attetgaeat egagggatgg cattacetee gtgtttetee etttegagee ggegggeeae
                                                                     960
```

```
agaegtegga agaaacteee gtatttgeag etggaactge ageecaegge geeceggttt
                                                                     1020
tecteceege cetgtecete tetggteaaa caacataeta aagaggegag geaatgaetg
                                                                     1080
ttggccagtt ctcaccgggg aaaaacccac tgttaggatg gcatgaacat ttccttagat
                                                                     1140
cgtggtcagc tccgaggaat gtggcatcca ggctctttga gagccatggg ctgcacccgg
                                                                     1200
ccgtaggcta gtgtaactcg catcccattg cagtgccgtt tcttgactgt gttgctgtct
                                                                     1260
cttagattaa ccgtgctgag gctccacata gctcctggac ctgtgtctag tacatactga
                                                                     1320
agcgatggtc agagggtgta gagtgaagtt gctgtgccca cattgtttga actcgcgtac
                                                                     1380
cccgtagata cattgtgcaa cgttcttctg ttattccctt gaggtggtaa cttcgtatgt
                                                                     1440
tcagtttatg cgatgattgt tgtaaatgca atgccgtagt ttggattaat aagtggatgg
                                                                     1500
tttttgtttc taaaaaaaaa aaaaaaaaa
                                                                     1529
       1373
6694
DNA
Homo sapiens
<400> 1373 aagcttgcat gcaggccacg ccccggagag tcacgtagct ctgcgacatc cgcagcctca
                                                                       60
tttaccagag ggagccaggg ctgcagctca tctgtttgcg gatcaagaac ccgagctgtg
                                                                      120
cttgtggctg cggctgctaa ctggctgcgc acaggtaagg ccaggcaagg cgggaccgac
                                                                       180
tcaacatctt ccgcttcatt tccttggcct cttcccctgc catcctcgtc ctgctacctg
                                                                       240
ggacteeggg atgtgeeett tegaceettt ectaacatet ttgeteettt eegegtaett
                                                                       300
gaaaccccat ggctcaacct cttctgttct atccctcttc agctctccca gctggacctc
                                                                      360
agetttteca ateccaaate etectetaet tgttggattt tteettggag tetgtetete
                                                                      420
ctacccagag cattteette teageetget ceeteteete etaggetagg teetetete
                                                                      480
agttctcccg ccttctctgc cccccggtct aggtctctcc cgctgactgg ttagcctgca
                                                                       540
teaccactag eteeceteag teteatetet eteteagget etetaeteet tteageettg
                                                                      600
gteetetgee etecegtetg ggtgtetaga ttgtggggaa ttgaagtget teetattget
                                                                       660
atcctcctgc caaacaggtg aagtgcttcc tgggcacaga gatgacccgg aggtgtcact
                                                                      720
agecetagte tecacacact aacacagetg accegetggg cectetttee tacateactg
                                                                      780
cagccccact ggggccaacc tctggtactg ggtgggaata ggcaataggc ataggcaggc
                                                                      840
                                                                      900
aggtttggag tacagaaaag gagaagctgc aggagcctgt gactggtatt tgtgccactc
ctactcccta cctgttcttc caaccttttc ctctagaagc tgagagaaga gggtggcaat
                                                                      960
aagtactttt gcctcattct gaagccttgg aagtaagtac actttcctag gggtcctgtg
                                                                     1020
gaggatgaga aaagggaagc tggaaaggcc aggacttttg cctacctcaa caagggacca
                                                                     1080
agttcagtga aagaagggtt ggcatccttg attgggcagc agatttatca gaagagctgt
                                                                     1140
ggcttcaggg ctgctcacct ccccaccccc accctgcatc tttccccagg gctgggaagg
                                                                     1200
atgeetacea gggaeaaaag gagatgtggg aactggagee etaagettge tagetgteag
                                                                     1260
aaggactggt gccacttgat gcccaggact catgccaagg actgctgccc tgttcccagc
                                                                     1320
cccttgcttg atggggaggc catttggccc atctggccag gagaggcagc agagggtgag
                                                                     1380
gtetggettt tttatettgt etecaeteca gggagetgte accatgeete actegtaece
                                                                     1440
agccctttct gctgagcaga agaaggagtt gtctgacatt gccctgcgga ttgtagcccc
                                                                     1500
gggcaaaggc attctggctg cggatgagtc tgtaggtaag tggacatctg tagccaggta
                                                                     1560
gggtacaggt ggctagggga ccctggggat gttctcactg cctctctttg tttgccccta
                                                                     1620
ggcagcatgg ccaagcggct gagccaaatt ggggtggaaa acacagagga gaaccgccgg
                                                                     1680
ctgtaccgcc aggtcctgtt cagtgctgat gaccgtgtga aaaagtgcat tggaggcgtc
                                                                     1740
attttcttcc atgagaccct ctaccagaaa gatgataatg gtgttccctt cgtccgaacc
                                                                     1800
atccaggata agggcatcgt cgtgggcatc aaggtgcagc ccctggccct gctctgaatg
                                                                     1860
gaagctgggt gtgaaaataa gcttgtgtag gaggggtagc aaggagaatc ctgcctggat
                                                                     1920
tcaaccetet gettgtaett cetetaeagg ttgacaaggg tgtggtgeet ctagetggga
                                                                     1980
```

2040

ctgatggaga aaccaccact caaggtatag gatgggtggg cttgaggacc aaagaggtgt

tagatagttg atgctggtaa aagaggggca gagtaatgag gttggcactg tgcttgcagg 2100 2160 gctggatggg ctctcagaac gctgtgccca atacaagaag gatggtgctg actttgccaa gtggcgctgt gtgctgaaaa tcagtgagcg tacaccctct gcacttgcca ttctggagaa 2220 cgccaacgtg ctggcccgtt atgccagtat ctgccagcag gtgtgtgtgt tgggagggtg 2280 gtgagctagg tgccctgtat gcctggtggg gagagagtca caaggctttc ttcatctccc 2340 ctactgcccc tcccaagcat ctctgctctt gcctgcagaa tggcattgtg cctattgtgg 2400 aacctgaaat attgcctgat ggagaccacg acctcaaacg ttgtcagtat gttacagaga 2460 aggtgagtcc acacctgggc acacaaacat actgcaggga cagctcggca ggagtgtctg 2520 ttccccagaa cccccagctt agatccaggc acactttccc ctagcacttt ttcacttcat 2580 cccggcacag gcctgtgatc tgagcctgta ctgagccctc acagtctgtg cccatctacc 2640 cctacatagg gagcatcgag cagtaaccag tgggggccca gacccttagt aaacctcctc 2700 taatccccac ccaggtcttg gctgctgtgt acaaggccct gagtgaccat catgtatacc 2760 tggaggggac cctgctcaag cccaacatgg tgaccccggg ccatgcctgt cccatcaagt 2820 ataccccaga ggagattgcc atggcaactg tcactgccct gcgtcgcact gtgcccccag 2880 ctgtcccagg tactacccag ctccctaacc tgctcctatc cctaaggccc atcttcaggt 2940 ccttcttgtg gccttcaggg gttccctatc ctggaaaaat tgggagtgac cagtcagttt 3000 gtettetete etecacaeta ggagtgaeet teetgtetgg gggteagage gaagaagagg 3060 catcattcaa cctcaatgcc atcaaccgct gcccccttcc ccgaccctgg gcgcttacct 3120 teteetatgg gegtgeeetg caageetetg caeteaatge etggegaggg caaegggaea 3180 atgctggggc tgccactgag gagttcatca agcgggctga ggttgggagc tacaggtggt 3240 ggtgggtggg ggcagcaccc agaggctata gcctgggcag ggcttggcac ctgtgggctg 3300 gctcagcctg cttactccac gctccctttt gcaggtgaat gggcttgcag cccagggcaa 3360 gtatgaaggc agtggagaag atggtggagc agcagcacag tcactctaca ttgccaacca 3420 tgcctactga gtatecactc cataccacag cccttggccc agccatctgc acccactttt 3480 gcttgtagtc atggccaggg ccaaatagct atgcagagca gagatgcctt cacctggcac 3540 caacttgtct teetttetet etteeettee ceteteteat tgetgeacet gggaccatag 3600 gatgggagga tagggagccc ctcatgactg agggcagaag aaattgctag aagtcagaac 3660 aggatggctg ggtctccccc tacctcttcc agctcccaca attttcccat gatgaggtag 3720 3780 cttctccctg ggctctcctt cttgcctgcc ctgtctcctg ggatcagagg gtagtacaga agccctgact catgccttga gtacatacca tacagcaaat aaatggtagc aaaacattct 3840 actttgcctg tctgttttac acatcaaatt cccacctccc agtttctgat ctctgctaat 3900 tetatetetg ggecetetga etetggaggt ggaggggtg ggatttgagt ettaetggge 3960 ttcaagttat ggaggaaggg cacatgcagt caccatcccc agctcaggct cttgctctct 4020 tgatgtccaa gtctggagtg gggcaatgag gaagactgca agtcttctag ggactcgcac 4080 atcagtggca ctgggctgca gctacagaag tatggagtga ggccaaactg gcaactcctg 4140 4200 aaggcagatt tgtgcaaggc tcaaagcagg gaggcagcaa gacaggctgg gataagagtg ggtgggagte teteceatet egeagtgtta ageceagetg ggaeetggta eegeeeaget 4260 gggacctggt accttccact agggtgagcc acaccagtaa gggcaagcga gcacctggac 4320 tecegeceaa agaggaaaac caaggetetg egggetgeea gggetgagea gggeatetag 4380 gaggttgcca agggctatgg ccattttcat ttggggtaga agtgggcaca aagggagcca 4440 attggagggt ctgggtaagg acagetetgg tgaggeetga tgetgaaett tgaecaetgg 4500 gctgggttgt gaggtaggct gagaacctgg gtctaagcag ataaaaagaa gagataacaa 4560 gctgcgtgtg ttctgtgtca actggggagg ctacaaatgc tccaccctgt gtggcctgac 4620 tttataataa caaaaatagc ttgcacatag caccaaccct gttctaatca ctttatatgt 4680 actgacacat ttcatacaac tctataaagt aggtactatt actatcatcc ctattttaat 4740 agagaaaaca ggcacagata ggcacagaac gatcttctca cgatcactca cctaataagt 4800 gatgaagcca ggatttgaac cgcagtgatc agcatctaga gtctgggctc atgacttttc 4860

```
aagattttta agtgaagtat tetgagtttt eeaagttgga aatgaattaa aacgtatttt
                                                                      4920
aaaatagcga gagaggccaa ttgtgctaaa acatactagc ttgctacctc cgtgtttgag
                                                                      4980
gctttgagga gagggcaccc taagaggagt tctacgataa ggataataag accgtgacag
                                                                      5040
ttgacgttga gggctttccg tgtgccaggc tccttacaag aacggcctca tttatgtaaa
                                                                      5100
tatctccatt ttcagatgag cctcggagct gcctgtagtt gcccagctag tatttaagga
                                                                      5160
ctgcagaggt tgcgctcttg attgcggggc tagaagtgtg ttctacaggg aagcggggaa
                                                                      5220
ettegtteea geagegeega aaccegeaeg geceetagge tgteeeteeg egeeegggtg
                                                                      5280
actteettte agateeeeag egaageteee ageggageee teeeaeeeet egeeegettg
                                                                      5340
etecegtetg egggtetgga gtagegeteg egattggeee egateacege egeggteetg
                                                                      5400
ccccctcgtt gcagagattc cgattgggtg aggctcacga agctctgccc ccacggtggc
                                                                      5460
eggageagee ggaagetage atggeggeeg eeggggetge ggetacacae etaggtgegg
                                                                      5520
tgggcttcgg gtggggggcc tgcagctagc tgatggcaag ggaggaatag caggggtggg
                                                                      5580
gattgtggtg tgcgagaggt cccgcggacg gggggctcgg gggtctcttc agacgagatt
                                                                      5640
cccttcaggc ttgggccggg tcccttcgca cggagatccc aatgaacgcg ggcccctgga
                                                                      5700
ggccggtggt tggggcttct ccgcgtcggg gatggggccg gtaccctagc ccgtttccag
                                                                      5760
egecteagte ggtteeceat geecteagag gtggeeeggg geaagegege egecetette
                                                                      5820
ttcgctgcgg tggccatcgt gctggggcta ccgctctggt ggaagaccac ggagacctac
                                                                      5880
egggeetegt tgeettacte ceagateagt ggeetgaatg ceetteaggt gagactgetg
                                                                      5940
tgcgggaggg tcgggggaca gcccccccgg caaggtggag actcagtgac ggccctgatg
                                                                      6000
etecticetg tageteegee teatggtgee tgteactgte gtgtttaege gggaqteaqt
                                                                      6060
gcccctggac gaccaggaga agctgccctt accgttgtgc atgaaagaga gattcctctg
                                                                      6120
aaatgtgagt tactggggat cagggctgct tttcgcctct gagctcagtt cagagctgag
                                                                      6180
ttgggtggga ggagcggggg tgtaccataa acgcagttaa aaacttactg ttgaaaqacc
                                                                      6240
tctgaatgaa cagtgtgttt ggtcagaaaa aaaactactt tcaattcaca gtcactaaat
                                                                      6300
agcaatttta ctcgtaagac aggctaccta atcggaagca gttgatgccc atcagggtat
                                                                      6360
aggggaagag gtgggatata gtggaaagaa cacagagttt gaaattaaat tggatttgca
                                                                      6420
tataggccct atttagtttg tttgtttatt tatttattat attttgagac gacttcgctc
                                                                      6480
tgtcgcccag gctggagtgc agtggcgcca tcttggctca ctgcaacctc tgcctcctgg
                                                                      6540
gttcaagcga ttcttctgca ccagccaccc gagtagctgg gattacaggc gcgcgacact
                                                                      6600
acgcccaget aatttttgta tttttagtag agacggggtt atgccatgtt ggccatgctg
                                                                      6660
ctctcgaact cctgacttca ggtgatccgc atgc
                                                                      6694
       1374
3881
DNA
Homo sapiens
^{<\!400>} 1374 gctgaagtgt tcgaccagca ggaggttttc tcctcagccc actcgctgca tccagatcag
                                                                        60
etcacceege gecettteet geceaceagg actetgatag eccetggeag ceacageeca
                                                                       120
ttttgccaag atgtctagag tagccaaata tcgccggcag tgagtgaaga ccccgacatc
                                                                       180
gacageetge tgggaceetg tetecegagg agatggagga getggagaag gagetggaeg
                                                                       240
tggtggaccc agacgggagt gttcccgtgg ggctgcggca gagaaaccag acggagaaac
                                                                       300
agtccacggg tgtgtacaac cgggaggcca tgctcaactt ctgtgaaaag qaqaccaaqa
                                                                      360
aacttatgca gagggagatg tccatggatg aaagcaagca agtggagacc aagacagatg
                                                                      420
ccaagaatgg acaggaaagg ggcagagatg ccagcaaaaa agccctgggc cccaqacqqa
                                                                      480
actcagatct ggggaaggag ccaaagaggg gtggtttaaa gaaaagcttc tctagagaca
                                                                      540
gagatgaagc tggtggcaag agtggcgaga agcccaagga ggagaagatc atccggggca
                                                                      600
ttgacaaggg ccgggtcagg gctgcagtgg ataagaagga ggcagggaag gatgggagag
                                                                      660
gagaggagag ggcagtggcc accaagaagg aagaggagaa gaaagggggt gacaggaaca
                                                                      720
caggcttgag cagggacaag gataaaaaga gagaggagat gaaggaggtg gccaagaaag
                                                                      780
```

aggatgatga	gaaggtaaaa	ggggagcgta	ggaacacaga	caccagaaaa	gagggtgaga	840
agatgaaaag	agcaggtggg	aacacagaca	tgaaaaagga	ggatgagaag	gtaaaaagag	900
gaactgggaa	cacagacacc	aaaaaggacg	atgaaaaagt	caagaagaat	gaacccttac	960
atgaaaagga	agccaaggat	gacagcaaga	ccaaaacacc	cgagaaacag	acgcccagtg	1020
gccccaccaa	gccctctgaa	ggaccggcca	aggtggagga	ggaggcagct	cccagcatat	1080
ttgatgagcc	tctggagaga	gtgaagaaca	atgaccccga	gatgactgag	gtgaacgtca	1140
acaactcaga	ctgcatcaca	aatgagatct	tggtccggtt	tactgaggct	ctggagttca	1200
	taagctgttc					1260
ccattgccat	catgctcaag	gccaacaaga	ccatcaccag	cctcaacctg	gactccaacc	1320
	caaaggcatc					1380
	cttccacaac					1440
	gaaggagaat					1500
	gactgtcacc					1560
	gcaaaggcag					1620
	cggggccgtg					1680
	aaagaactca					1740
	ggctccaccc					1800
	gatgggagac					1860
	catccgctcc	_		-		1920
						1920
	ggaccaggct					2040
	gctacacaga					
_	catgggagcg					2100
	ccttttcttg					2160
	gacaagaaga					2220
	ctggcaagct					2280
	ccagccccac					2340
	tgctgggcca					2400
	caaaggggag					2460
	ggcaggggca					2520
	tgggacagac					2580
	cacctgctgc					2640
	caaaccttta					2700
agtcctgatc	ctaaccctgg	gctccctgga	ggactctaga	agctcaggtt	ccctgccaca	2760
ctatttgagt	tggccaagaa	ataaattcac	atcctcagaa	agtgcagcat	ggaggaaaat	2820
ctgaactcta	agcagaagac	tctccactga	cctggttgtc	caggtctaga	aggccaggcc	2880
tctactaggt	ctgctcctga	accagtcctg	ctgcctggag	tcagtagcca	gagttgttct	2940
caggggtgct	ggggcagagt	ggagcccagg	gtgctgggat	ggctatatta	ggcatgttca	3000
gggatgctca	ttccatgact	ctgcctaacc	atgggctcag	ggccaggtcc	tcacagcagt	3060
cacaggccca	ggaaggcggc	aggcagagaa	gtggagtgac	tatttggaga	atagcaccca	3120
tatctgtgtg	ccctagggct	cagaggggcc	tcatcttccc	cagccctccc	cacctgctca	3180
ccaattccac	ttcctgcccc	aactgcagga	atgctgacaa	tgctgccatg	cccaccatcg	3240
ggtgtaggtg	aaaggcatct	ttctgaattt	cattctcttg	aaggtgctgc	caccccttgg	3300
cactgtggaa	ctgccacctt	gggtctgtgt	cacttgtagg	tttctctgcc	tccaggttgc	3360
ctcaacagca	ggaggcacag	cagtttcacc	atctttgagg	tgagggtggg	gtgccccagc	3420
taggaagcaa	gatcgctgtg	ctaggtctga	ccaaaaccag	agggcagtct	agtcctgggg	3480
gtaaagccct	cagatcccag	ggtacactct	tctccattcc	ctccacccac	ttgcctgtca	3540
ccccagtcac	ctaagcaatc	actgggccca	gaggagagga	gacagacaca	cactggctcc	3600
tggacctaaa	gggtatgagc	tggagctaag	gccagctaga	gcttccactg	tcagccctca	3660

```
ctgtcagccc cactgcaccc ccctgtgcct gctgggcact gggcactagc tagatgcttt
                                                                 3720
aggttgcttc agctgatcct tcaactctgt gaggtggata ccaatattct attttgcaga
                                                                 3780
tagaatttgg cccagagagg ttaactaata tatccatgat cacacagcta ataaaagtca
                                                                 3840
gagctcagga aaaaaaaaaa aaaaaaaaaa a
                                                                 3881
      1375
874
DNA
Homo sapiens
<400> 1375
gggcgggaag acgtgcagcc tgggccgtgg ctgctcactg cgttcggacc cagacccgct
                                                                   60
gcaggcagca gcagcccccg cccgcgcacg agcatggagc tctggggggc ctacctcctc
                                                                  120
etetgeetet teteeeteet gaeecaggte accaeegage caecaaeeca gaageecaag
                                                                  180
aagattgtaa atgccaagaa agatgttgtg aacacaaaga tgtttgagga gctcaagagc
                                                                  240
cgtctggaca ccctggccca ggaggtggcc ctgctgaagg agcagcaggc cctgcagacg
                                                                  300
gtctgcctga aggggaccaa ggtgcacatg aaatgctttc tggccttcac ccagacgaag
                                                                  360
accttccacg aggccagcga ggactgcatc tcgcgcgggg gcaccctgag cacccctcag
                                                                  420
actggctcgg agaacgacgc cctgtatgag tacctgcgcc agagcgtggg caacgaggcc
                                                                  480
gagatetgge tgggeeteaa egacatggeg geegagggea eetgggtgga eatgaeegge
                                                                  540
                                                                  600
gcccgcatcg cctacaagaa ctgggagact gagatcaccg cgcaacccga tggcggcaag
accgagaact gcgcggtcct gtcaggcgcg gccaacggca agtggttcga caagcgctgc
                                                                  660
cgcgatcagc tgccctacat ctgccagttc gggatcgtgt agccggcggg gcgggggccg
                                                                  720
tggggggcct ggaggagggc aggagccgcg ggaggccggg aggagggtgg ggaccttgca
                                                                  780
gcccccatcc tctccgtgcg cttggagcct ctttttgcaa ataaagttgg tgcacgttcg
                                                                  840
cggagaggaa aaaaaaaaa aaaaaaaaa aaaa
                                                                  874
      1376
3573
DNA
Homo sapiens
      misc feature
n=a,t,g or c
<\!\!400\!\!>~1376 totagacana taaaaataaa agaaatcato caagaatggt gacttgccta ctattctact
                                                                   60
cgagaggctg agaggggagg atttcttgag cccaggagtt tgaggatgca gtgagctatg
                                                                  120
180
ggctgggctt ggtggctcat gcctgtaatc ccagcacttt ggaaggccat ggtgggcaga
                                                                  240
ttgcttgagc ccaggagttt gagacgaggt gggcaacatg acgaaacccc ggctctacca
                                                                  300
aaaaatacaa aaaattaact gggcataatg gtacatgtct gtggtcccag ctactcggta
                                                                  360
ggctgaggtg ggaggaatgc ttgagcccag gaaatagggg ctacagtgaa ccaggatgat
                                                                  420
gccagtgcac tccaacctgg gcaacagagc aagactctac ctcaaaataa tttaaaaaaa
                                                                  480
tggattaatt gggaataggt ggcttgtgcc tgtagtccca gttactcagg aggctgaggt
                                                                  540
gggaggattg cctgagtcta ggaggttgag gctgcagtga gccgggatgg taccattgca
                                                                  600
ctccacctgg gaacagggtg agaccctgtc tcaaaaaaga aaaaaaaggg aggggttata
                                                                  660
720
ggtgaatgct ctgtaactat tggtgaatgc tctgtaacta ttggcttttt tattgttccc
                                                                  780
attttacata taaggaagct gaggctttgt gaggagaaat agcttagccc aggtcatcca
                                                                  840
gtgggaagcg tctggtgaag aggaatagtg atcatggtgg gactttgcct agcctaaggt
                                                                  900
960
gccttgtcct cctgccccac agcaggaaat tccaaggtgg ttttctttac aggctcctcc
                                                                 1020
gettetgtgg ceagagggga eageggagga geeeaggtae etaageeaae teaagagaag
                                                                 1080
atggaattga atatttcaac caccttatct aggcctctgt gattgttgag gagggggctg
                                                                 1140
```

```
tcactgggaa agttgtgagc tgctttggac cttatctggg aatttccttg ggcttacagc
                                                                     1200
ctttacccta tccttgaaat ggttctggtt tcatagcaac ttctaggtgg tgtgggcgaa
                                                                     1260
gtttgggact ggtttagggc ggggacaaga ccaagaacac aagtttcctt gtactaggga
                                                                     1320
gagagggagg ggaggaaatt ggagacccca gcacccctt gctcactctc ttgctcacag
                                                                     1380
tccacgatgg cccggtccct ggtgtgcctt ggtgtcatca tcttgctgtc tgccttctcc
                                                                     1440
ggacctggtg tcaggggtgg tcctatgccc aagctggctg accggaagct gtgtgcggac
                                                                     1500
caggagtgca gccgtaagaa tggggagggg tagaattggg cttgggtgtt agcctgtgtg
                                                                     1560
gatgtgctgc atteccettc tattccttcc ctagacccta tctccatggc tgtggccctt
                                                                     1620
caggactaca tggcccccga ctgccgattc ctgaccattc accggggcca agtggtgtat
                                                                     1680
gtetteteea agetgaaggg cegtgggegg etettetggg gaggeagegt gegtettggg
                                                                     1740
agagtgaaag agggaagggt acagagctgg ggtagactca ttatccccat gaagggaaga
                                                                     1800
tttgaggggg gtgaactgaa atagacattg tggggggata ttgttactta ctttatttta
                                                                     1860
tttgcttatt attttttaat tttttccgag acagagtctt gctctgtcac ccaggctgga
                                                                     1920
tgcaatggca cgatctcggc tcactgtaac ctccacctct tgggtttaag cgattctcca
                                                                     1980
gcctcagcct cccaagtacc tgggattaca ggcatgcacc accacacctn ntaatttttg
                                                                     2040
tatttttagt agagacaggg ttttaccata ttggccaggc tggtcttgaa ctcctgacct
                                                                     2100
catgatctgc ccgccttggc tcccggagtg ctgggattac aggtgtgagc cactggccc
                                                                     2160
ccagcctatt ttcactttat ttaccaattt taggacctga tatggtccca nnntctgttc
                                                                     2220
tagatctaga caccaagata caacaacaaa tgatcctttt tattctaatg gagggaaatg
                                                                     2280
aacaaaaagc aaggcataaa aaatagcagc agccgggcac agtagctcac acctgtaatc
                                                                     2340
ccaagtaagg ccaagtningg aggatagett gageccagga gttegagaee ageetgggea
                                                                     2400
acatagcaag acccccatct ctataaaaaa aaatttaaaa ttaactgggc atcatggcat
                                                                     2460
gtgtctgtgg tcccggctac tcgggaggct gaggtgggag gattgcttga tcccagaagt
                                                                     2520
tgaggctgca gtgagccgtg atcatgctac tgcacctcaa cctggccgac acaatgagac
                                                                     2580
cctgtttcca aaataataat aataaaagca aatatgcgct gctgtgagaa ttaacagaga
                                                                     2640
cttacttggg tgttcagaaa gggcctctga acaggtggca tttaagctga gattcatatg
                                                                     2700
acaaggatgg agcagttatg tggagatcag ggagagggga gaatgcaaag gccttcagca
                                                                     2760
ggcacaagct tgccatcttc cagaccctag cttttaactc ctcttcccca ggttcaggga
                                                                     2820
gattactatg gagatetgge tgetegeetg ggetatttee ceagtageat tgteegagag
                                                                     2880
gaccagaccc tgaaacctgg caaagtcgat gtgaagacag acgtgagtgt catgggggct
                                                                     2940
ggcaagaaat gtggggggag gacccttagg ttgtggggat gggcaaaaat gctcccacac
                                                                     3000
ttggctccct ggccgcctag gtatgtgcgc tgggagaaat tctttccctg cctcaatttt
                                                                     3060
ctcaccagta aaatgggtcc agttgggagg tgcaaagatt agagggctct aggctaattt
                                                                     3120
gcatagcann tgtgtggcca gacctgggcc ctgcagctgc agcctttgct aaaaccacta
                                                                     3180
gateetttgt ggtgtgaeeg etggttttet tteeaetgtt teeeetttet ettttteaga
                                                                     3240
aatgggattt ctactgccag tgagctcagc ctaccgctgg ccctgccgtt tcccctcctt
                                                                     3300
gggtttatgc aaatacaatc agcccagtgc aaacggctcg tctccgtggt ctttggggtg
                                                                     3360
gggtagggta gggtggggac tgtacaaatg aaatgtttct ctaggttgct gaatctaacc
                                                                     3420
aattaacccg ctgcctgtgg taacgtcagt ggttgctagg cagagtttcg ctgatgaaag
                                                                     3480
ccctgtgcag taggagcgct cctaagctta ggtttcgaca caagcaaaga aaacctaagc
                                                                     3540
agcccaacta gggattgtag tgtcctctct aga
                                                                     3573
      1377
14117
DNA
Homo sapiens
<400> 1377
tttctttcaa aatatttctg ctcattgaca atgcatctga tcacccaaga gccctgatgg
                                                                       60
agctgtccaa ggagattaat gtttttgtgt ttgccaacac aacatccatt ccacagccca
                                                                      120
tggatcaaaa actaattttg actttcaagt cttattacct aagaaatata tttcataagg
```

180

```
ctatagctgc catacagatg attcctctga tggatctggg caaagtaaat tgaaaacctt
                                                                      240
ctgaagagga ttcactattc tatatgtcaa tatttgtgat tcaagagagg aggtcaaaat
                                                                      300
atcaacatta acaggagttt ggaagaagtt gattccaact ctcatgtatg atgttgaggg
                                                                      360
gcttaagact tcagcagagg aagtaactat agatgtgttg gaaacagcaa gagaattaaa
                                                                      420
attagaatgg agcctgaaga tgtgactgaa ttgttgccat gttatggcaa aacgaacgga
                                                                      480
tgaggaactg cttcttattc atgaacaaag aaagtggttt cttgagatgg aaactactcc
                                                                      540
tggtgaagat gctgtgaaca tcactgaaat ggcaacaaag gatttggaat actacatcaa
                                                                      600
tttagttaat aaggcagtgg cagggtttga gaggactgac cctagttttg aaagaatttc
                                                                      660
tactgttaaa atgctatcaa acagcatcac atgctacagg gaaatctttc atgaaaggaa
                                                                      720
gagtcaactg atgcggcaaa cttcactgat gtctcatttt cagaaattgc cacagccaca
                                                                      780
ctaacttgca gcaatcatca ccctgatcag tcctcagcca tcaacattga ggcaagacct
                                                                      840
tccaccagca aaaagattat aacttgctga aggctcagat gatccttagc atttttagca
                                                                      900
agaaagcatt tttaaaatta agttatatac attgttttta ggccataatg ctatggtaca
                                                                      960
cttaatagac tatagtatag tgtaaatata atgtttacat acacagaaaa accaaaaagt
                                                                     1020
ttgtgtgact cactttatgg ttacatttgc tttattgtgg tggtctagaa ctgaacatgc
                                                                     1080
actatctctg aggtatgcct gtatcttcct ctatcttcag tgggtctcca aaccacctga
                                                                     1140
aggacatgct aaacacaggc tgctgcatcc cagccccagc ctcagagttt ctgattcagc
                                                                     1200
cagtctggga tgagcctgaa aaactgccat ttcttttttt tttacatttt attttattt
                                                                     1260
ttatcaaagc agtgtatcta cattgtttaa ataaaacaac attaaatagc aaatatttaa
                                                                     1320
aaactgcaac atctatgcct tctttctttc tttattgtta ttatacttta agttttaggg
                                                                     1380
tacatgtgca caatgtgcag gttagttaca tatgtataca tgtgccatgc tggtgtgctg
                                                                     1440
cacccactaa ctcgtcatct agcattaggt atatctccca atgctatctc tcccccgtcc
                                                                     1500
ccccacccca caacaaatga gaacacatgg acacaggaag gggaacatca cactcttttt
                                                                     1560
tttaaaaatt ttactttaag ttctgggatg catttgcaga atgtgcaggt ttgttgcata
                                                                     1620
ggtatacatg tgccatggtg gtttggctgc acctatcacc catcatctag gttttaagcc
                                                                     1680
egeatgeatt aggtatttgt tetaatgete teteteeett tgeeceecat eeceegaeag
                                                                     1740
gccctggtgt gtgatgttcc cctccctgtg tccatgtgtt ctcattgttc aactcccact
                                                                     1800
tatgagtgag aacatgtggt gttcggtttt ctgttcctgt gttggtttgc taagaatgat
                                                                     1860
ggtttccagc ttcatccatg tccctgcaaa agacacgaac tcattcttt ttatggctgc
                                                                     1920
atagtattte atggtatata tgtgccacat tttetttate cagtetgtea ttgatgggea
                                                                     1980
tttgggttgg ttccaagtct ttgctattgt aaatagtgct gcaataaaca tacttgtgca
                                                                     2040
tgtgtcttta tagtagaaag atttataatc ctttgggtat atacccagta atgggattgc
                                                                     2100
tgggtcaaat ggtatttctt ggttttagat cattgaggaa tcaccatgct gtcttccaca
                                                                     2160
atggttgaac taatttacac teecaaceaa cagtgtaaaa gettteecat ttetecacag
                                                                     2220
cetttgccag catetgttgt taccagactt gttaatgate accattetaa etggcatgat
                                                                     2280
atggtatctc attgtggttt tcatttgcat ttctctaatg accagtgatg atgagctttt
                                                                     2340
tttcatatgt ttcttggcca cataaatgtc ttcttttgag aagtgcctgt tcatatcctt
                                                                     2400
tgcccacttt ttgatggggt tgtttgttat tttcttgtaa aattttgttt aagctccttg
                                                                     2460
tagattetgg atattagace tttgteagat gggtagattg caaaaatttt ctccaattet
                                                                     2520
ataggttgcc tgctgactct gataacagtt tcttttgctg tgcagaagct ctttagttga
                                                                     2580
attagaccca tttgtcaact ttggcttttg ttgcaattgc ttttgctgtt ttagtcatga
                                                                     2640
agtetttgee catgeetatg teetgaatgg tattgeetag aetttettet agggtgaaaa
                                                                     2700
ctcacatttc taacatgttc ctgagtcagg ttgatgctga gagtgactga taacacctta
                                                                     2760
ttataataat tatagttttt gggtgagagg attaaatggg caaattaatg ccaagcactc
                                                                     2820
agcaccatgc ctggtatttg tatacattcc acaagtgctg gctatgattc tgaagggtgg
                                                                    2880
ectgatgagt etcatecett gtagttggta ttgecateae aceteettee atetgatget
                                                                     2940
ataatettet etaaataggt aateeagaea aggtaetgga atttgtagtt gttgeagaga
                                                                     3000
```

atcaaattgt gagagtattt gatctgaccc cctcgattgg catgaagaaa ctgaggtctg 3060 gagagacaaa attactttcc caaggccaaa tggcaagtca gaggcagtat atctacgctc 3120 teettttett atgeaatgaa tgagetgggt ggeattttee ettteetgtt ettgtaetga 3180 catttctggg aatatgtgaa acataaggca agtacttata ccccaaaatt atatcaagaa 3240 gattactgaa taaaaaagtg gctatatagc acacacatac taaatgtgaa gctcacagct 3300 tttgcagcca ggactgaaaa ccactgctct agcatgttgc cttcttaagt gaatgcccag 3360 ggcttctata gttgggcaaa tatgctccct gtctcctggc ttagctcatt ccagggctat 3420 agaacateet tteecaaggg agtggattea caetgettee atagtetgag ateetgaagt 3480 gagccttccc catctgccac aacagaaagt aaaagtagaa cctgtccaac tattctcagt 3540 ctgttcaaca aacaatttat tgagcacttg acaattgtgt atatggtgca gtgataattg 3600 aatggatggt ccagaggggg caagacagag cagctgccac ctggagatgt tcatgatatg 3660 gacttttcca agaggaagag accaactgga aagatgtacc tgattcttag gcttctgttt 3720 gggtcttttt ttttttttt tttttgcctt ttgaaggggt gcagcattcc tggaggtact 3780 gcaataccag gtcaacatgt agagtgaaca gagcaagctc ttattccatc tccctgctcc 3840 caaaatccat ttaatatgtt gtcctcagat ggaggacgta tcagatatta agacgataag 3900 aacagatacc acacttgate ttagecaaaa ggetgeacaa agaagtgatg etgeetatgt 3960 cttgagttca ttctctcccc actgatatta ttttcttccc cttggcagga agatgatgtc 4020 tgttaggaag cetetgaggt teetgtteet ttetgetgga tttatgeege tgeeageate 4080 ggagcagttt ctaccaccca cacatttcct tgttaaatag ccaggcctct tcccatgggg 4140 aatgetttea ttaaaagagg cageeactge tgeacagaee tgeaggette teagggetag 4200 agcaggcggg ggtgcagtgg gcaaagccag tggaggcaca ggctgggttg tggcagtctc 4260 ctggagggcc ctgccctagt aatgagggcc caggcatgcg gctgaccctt tgaagatgtg 4320 tcctgaagct ctctcatggt gatcaatgac aggaacccag actcctgctt tagccaaatg 4380 ataagtttgg cctcttttat tggaaaccaa attacaaatt aattagcagc ttcctctggg 4440 gctgggtgtg aacatcaaca ccacccaatg atgaatttct atcatgagcc ccctcactgc 4500 aagggcataa aatggcccgg gcggcatggg gtctgtagac atccaggtag ctgtggctga 4560 ggagaaaggg cctctccaac atgacatcct cctgctgtgt caccaacaac ttgcaagcct 4620 ctctcaagag ctgccccgg cctgcctcgg tctgttccag cggcgtgaac tgccggcctg 4680 agetgtgeet gggetatgte tgeeageeea tggeatgeet geetteggte tgeetgeeea 4740 ccaccttccg gccagccagc tgcctctcca aaacctatct atccagttcc tgccaggcag 4800 ccagtggcat ctccggctcc atgggccccg gcagctggta cagcgaaggg gccttcaatg 4860 gcaatgagaa ggaaaccatg cagttcctta acgaccgcct ggccagctac ctgacgaggg 4920 tgcggcagct ggagcaggag aatgcggagc tggagagcag gatccaagag gcctctcact 4980 eccaggtget caccatgact cetgactace agteteattt caggaceatt gaccagetee 5040 5100 tggcattcca gattggaatc tcgttagctt attaagctat gttcaggaca aagagacttc 5160 cctagggcat agggttattt tataatttga gcactcagcc tgaggctttc atgtggagag 5220 atctgggatc tagtctcagt tctaccattg cctcattgca tgactttggg ggtcccatcc 5280 cttccccagg cctcagtttt ctcatctgta aaacagggat aataatggtc gttatctaat 5340 ggggttgtca aaaggatttg atgagatgat gcaggtcaag tgcttggaac agcccctggt 5400 ccacggtaag ttttcagtaa atgtcaaaga cccttctaac tgtcacatga gtgacttcag 5460 acatgagatt cttcccttcc acattgcttg gcacatccaa aatggggaat ttgaatttac 5520 gaagetteag gttettaaaa aataeatete aagtteteea aggaetagea attegetaaa 5580 tateteeeag agtteeaggg aagaggaeet tetgeaggga tggetgeagg getgetggat 5640 ectacettig etgetgiett etetteatti gggitettet igettegiet eateetgaae 5700 taaccctctc catgtgcctt ggcctacaga ttctgtgtac caaggcagag aatgccagga 5760 tggttgtgaa cattgataat gccaaactgg ctgccgatga cttcagggcc aagtgagttc 5820 agtcgggggg ctggagctgg ggaggacctg tcctcatagg ctctggggca actttccatt 5880

agtttcacgg agggttggaa agtgccggca gtttaaggcc ttccctgagt tctgcattct 5940 gtttcaccet tggttgctga ccetgteett gtgcaggtae gaggeagage tggccatgeg 6000 gcagctggtg gaggccgaca tcaatggcct gcgcaggatc ctggatgatc tcactctgtg 6060 caaggctgac ctggaggccc aggttgagtc cctgaaggag gagctgatgt gcctcaaaaa 6120 gaaccatgag gaggtgaggc tgggaagtcc cgctgaagtg gccccgggaa gcagaggggg 6180 aggaacgtgg ggtatggggt tggataggcg tgggttgaaa ttcccaagcc tgccacatgt 6240 tgttttagtg actttgccca atttatggaa tcttcctgag cctcctcttc tgtaaaatgg 6300 ggacaacatg atcacgcagg gttattgtga ggatttaatg gacaggatat ggatcatgga 6360 aatccccaag gcatgggtat gaaacacctg ccacttggtc aactctcaga agtgtagccc 6420 cettecette tgcattteet gggetagtgt gactgecaag cacteactag tggcaactge 6480 atttttttct ctcgagagcc acacagcaga ggtagagtgg tgcagtggtg ccggggtgag 6540 ttatgttcca gatctcacgt tgaatggcct gtccatctct gcctggctca actctcagaa 6600 gcagtcccat ctcttctgag agggagtaca gctgcagtgg tctcctcttt ttgcccctat 6660 cettattttg teeteeette tgtttgeata taaaatgete aagetgaage cetttaettt 6720 ctgatttttc cttatctcct gaagtttctt ggaggggaag ccctctgctt tgggcacctg 6780 tgtgctgcca agcccacctg agccatggtg tttttccccc ctccctcctt gactctcaac 6840 ctcttgactt gggatttgaa tgaacaagtg cctctgaatc ttggctgggt ttcctcaggg 6900 cttaagtgta aagtaacaat cagtcaccac gtactcaccg agcaccctcg ggctcctgac 6960 tcatcttgct caaatcagag aactgggaac ggcaccaaga agccactaat gagaagttat 7020 7080 cacacateet ggeagactea gtgacaactt teeetettgg cagecaagee tgggaggeag ctgccctaac tcgggccttt aactagtcaa gccaggctcc tgctaccctc ctccaggatg 7140 aacacaggtg gggagggaga ctgggaatac taggggtacc ggtttcccat tttagcccaa 7200 atgcatcaaa caaaccaggg tgctgctctt ggcttctgcc aaagtgagag gaagtgttgt 7260 gttgcagtga ggttcccatc gcaggggtat tcagctggag tttgaagagc actgggatgc 7320 tgctgagtgg actgcagtcc ttaggggcca tctaatgttt caatctttag caacttttgt 7380 tgcatctttt catgtctccc tggggaggtg agccaggatc ctatgattgt cacatttttc 7440 tggaggtett gtgcetttte aggaagtegg tteeettega tgceagettg gggaeegeet 7500 taacatcgag gtggacgctg caccccggt ggacctgacc agggtgctgg aggagatgcg 7560 7620 gtgtcagtac gaggccatgg tggaggccaa ccgcagggac gtggaggaat ggttcaatat gcaggtgggc ctctcacggt ggggatggcc tcctccatat ccctaggaag ggactctagc 7680 cttctccttc ccccaactgc agatggagga gcttaaccaa caggtggcca caagctctga 7740 gcagcttcag aactaccagt cagacatcat tgacctgaga cgcacggtca acacgctgga 7800 gategagetg caggeccage acagectggt gagagetget gggtgggeae ceatecetee 7860 ggatcctagg cggtactgag cataggtgca ggtccccagg aaagaggaag aggaggctca 7920 gatttcagcc accatggatg ctcatcctgt tgacttttcc cggagggagg tttctcccga 7980 gatccagctc agagataaaa aagggatgtt tcaaatcaga catgggttag gtgacactgt 8040 caaactcaac tccactaaga aggcttgttc tgtgcttagc ctgcccttcc aaacctatgg 8100 atctcaatat cacccatcct gatacccagg ttcttttctg gaccaactga accagagtct 8160 8220 tgcccaggct ggagagcagt ggcatgatct cagctccctg caacctctga cccgctgggt 8280 tcaagtgatt ttccagcctc agcctcccaa gtagctggat tacaggcgtg caccactatg 8340 ccctgctaat gtttgtattt ttagtagaga gggggtttca ccatgttggc caggctggtc 8400 tegaactect gaceteaggt gatecacetg cettggeete ceagagtget gggattacag 8460 gcatgagcta ctgtgaccgg ccagccatgg gtattttttg agggctccca tgtggcgcta 8520 atgtgcagct aggtttgaaa acccctgttc taaatgatgc cggcagggag ggtacttggg 8580 aaateteagt eeaateetga aggeagaeaa aggttgegga agaaaggagg gatttaggat 8640 cagatttacg aatagaaact gtggttccat aatgtaccag ctgtttaccc ttgaacaagt 8700

catttgacet ttetgggett etgttteeaa agtgaetggt gtagggaggg etteatttee 8760 agcatcaaat ggagatttgg ctcttcttgg ttctttctga agcaggccat ggtaaacagc 8820 tecetteete atggttatgt etteetttge ettagaggga etecetggaa aacaegetga 8880 cggagagtga ggcccgctac agctcccagc tggcccagat gcagtgcatg atcaccaatg 8940 ttgaggccca gctggctgag atccgggctg agctggagcg gcagaaccag gagtaccagg 9000 tgctgctgga cgtccgggcc cggctggagg gcgagatcaa cacgtaccgg agcctgctgg 9060 agagtgagga ctgcaagtat gcaggcccag ctgaggctta gagagacgtg ggcagggatt 9120 ctgggaggtt ataggaagca actggatcta cccttgaggg accatcagct tagaaccctg 9180 tcctgactat ggagccatta agaagctggt atgctctgaa ggaagtcagg cagtggtgtt 9240 catgctgcca tcctgaacca agcccctcgg agaccattct atctcattcc aagctggcaa 9300 gctccttcta agtgcccacc atggggcagg tgctatggag gacaccaaga tagaggaaga 9360 cagggcattt gcctcctgtc atttccatat gtttagggag ataggcagac aggtgactgg 9420 aggtcatggc ctgtccggag cttaggatga aaagcagctt tattaatagt acctacacat 9480 ctgctcccac tcttacccag cctcacctca tagctccatt cctctcagaa cggagatttt 9540 ggcatgtcag caggacaata ggtagccttg tgtaattgag ccctggtggg gagcaggaca 9600 ggaaagatca gccggggccc atttatggag aacaacacgg gtcatactgg gaagggaggg 9660 ctttaattta taggtgagtg gaaattgttt tgaggaggaa atgagagaat ttactgtgtg 9720 tettetecae tagatggtaa acatetagaa tgeagagaea ttataataea attttattee 9780 ctgtacgtgg cacatagtag atgctcagta aatgtctctc aagctcaaag ctgttcttca 9840 ggaagatggc cctgatagca gcaggaagaa ctgagtagag ggaggggaac caggcaggga 9900 aactgtccag gaggccctgg ccacagccta ggtaagcaat agggagggcc tgagttaggg 9960 cagcagaggc atcagctcta gacactgtgc aggtagaatc agcaggactt ggtggctgtc 10020 tgaatgcagg gtacctctgg gccatggaca cccggtgggc tgacgactgt tgtagctgtt 10080 tettatteeg eatttggegt tgetteteea teatteagaa tetataaett eagggeaagt 10140 gttgtgtcaa acatttgcaa ggaccaggcc attaacatgc atgaatgacg tgggtcatac 10200 tgagatggta gaaaagcaga aagctcttgc cttgtccaat ccaggcaatg gcatgccctc 10260 agggccactc tactgtgtga gaagcaggtc caatattgct gatcttccaa tagttccagg 10320 gaagctgaga atctgggttt ttaaaaatgt taaattctcc tgattcttaa gtattttcaa 10380 aaaattaaag aaaatatata gtgccaggca aatggaacac atttcaggtt gcacatgatc 10440 ctcaggcctc ccattggttc tctgagctac tgggtttcca tccagcatcc agtgtgttgt 10500 tectggtttt gagtgeatge etgteagtet etgagteate ettttteett teaceatgta 10560 ttaattcttc attcatttat tgttttgtct gatccaaata ttcttattag gtgcctattc 10620 tatgtgaggt atgcagggtg ggcatgggtc tgtggctgct ggcctcactg cttggccggg 10680 gagacagacc ataatagaat gattactact cacgatgaaa ggagatacat gtaccatggg 10740 ggctttgtct cagagaggtg ggggaggctt caaggaggac gtgacagttg agttgagctc 10800 ttaaacaaga gaagaaatgt aggtgagtgg agaggggaag agggttccag agatgtacgg 10860 cacaggcaca agecetgtgg cetgagcagt acagtecetg caggagetgg aagaaggtea 10920 gagtacctgc agctcccaga gtaatggagc tatcaggtga ggctggggca agaggtggga 10980 11040 taacttetgg gatacatgtg cagaacgtge aggtttgtta cataggtgta catgtgecat 11100 ggtggtggtt ttgttgccta tcaacccgtc atgtaggttt taagccctgc atgcattaga 11160 tatttgtttt aattttetee etecetgete eeeteacete tegacaggee eeagtatatg 11220 atgttccccg gcctgtgtcc atgtgttctc attgttcaac tctcacttat gagtgagaac 11280 atgtagtgtt tggttttctg ttcctgtgtt agtttgctga gaatgatggc ttccagagga 11340 agetgetttt cateetgage teaaatggaa gecaetgaag gttttaggga ggggagggae 11400 ataattggat ttgtgactgt agaagattgc tctggctact aagtggacag tggttaggag 11460 gggcccaagt ggggttgggg agatcagtta ggaggccatg aggtgactca ggcaaagatg 11520 gcggaggttg ggaccaggga ggctgggcag agaaagcacg gaagatgggg ttgagaggca 11580

```
tecgagggga gaattggeag gaeetgtgge egagtgggee ttetetaeta ateetgttte
tetttagaet tteteetgea ggetgeeetg taacceatge teeacteett cetgeaceae
                                                                    11700
ctgtgtgccc tccccatgcg tgacccgcac cgtctgtgtg ccacgcactg ttggcatgcc
                                                                    11760
                                                                    11820
ttgctcaccc tgcccccagg gccgctactg aagtcccttt gtgccagtgg atcctggagg
gcctggggct gggcagcctg gtattcagtg gccaccagaa gagcagggcc agccccggtc
                                                                    11880
agcaaggaag accetgagca ggacegtgga teacetgeaa caagetetga tactecaggg
                                                                    11940
gatacttaag ccctcatcac ttcaaaactg cctcttttt ccatgggtga actgttctct
                                                                    12000
                                                                    12060
ttggtgatgt ttctggttgt ctgtgctgcc tcaaagagcg tgtgttctta gttaactggc
                                                                    12120
aaatagagct gtactcagtg gccttgcaaa catgtctgtc tctgtttgtc acttacgctg
                                                                    12180
ctgcatccac aagccaatcc tactcaattg ggcttaagag gaacgtgggc aaattctgta
tttattttta tgctccttct gcttccatag aggcttgaga ggtgttcact aaaagggccc
                                                                    12240
gcatgccata aaccagttaa aactaatcaa ttactctaga gccaagtaat aaaagaataa
                                                                    12300
agagaggagg gagataatta tgccagaaac ctaggccaaa ttactgtaat tgagaatcat
                                                                    12360
atcataataa acccaccct aaatctcatt acagctggta caatgtgatc attcattctt
                                                                    12420
tcaaaatatc ttcactgagc agctactggg tgcaggttct gcattagagg ctggctaatc
                                                                    12480
caaggaagag ttcccagaca cattgttagt aatgcttcat ttaatccttg caacaatccg
                                                                    12540
tgaaaaatat gccattattg catccatttt gtaaatgagg aaactgaggc ccagagaagt
                                                                    12600
                                                                    12660
taagaaactt gcccaaagtc acacagcttg ttagtggcag acccaggact gaaatcgagg
cctttgggct ctagagatgc tcaaccgatt cacattcaca gtcctcacta tttgcaaact
                                                                    12720
                                                                    12780
acagetqqqt qeaqqqqqta ttaaaaatge aagtgateac caccatteaa acaettgtaa
ttacaggagg agctaagacc catgtgcata agatgccact cctttcttca taagggccat
                                                                    12840
ataatagtaa cagtaataat agtaataatg gcaacggtta ctaattcttg agcacttata
                                                                    12900
                                                                    12960
atgcactgag tactgtgtgg agcatattac ataaattaac ttatgcagtt ttcatgacca
ccttgtaagg tacacatagt atccatttta gacatggaaa tggaggcata gggtggtcaa
                                                                    13020
gttagttgtt gaaggttaca tgcaaggaca aagacttaaa cccaagtcta gcttcacagc
                                                                    13080
                                                                    13140
agtgttattt taaccattct aactgccaaa ttcctaccca gaaagagtaa acactagtca
agatttggag aaagtcttaa gctgagagga tcctgaaagg cttcttgtag ctggtggcat
                                                                    13200
                                                                    13260
ttgaaatagg tcttggaggt tgaatagaag gtctacaggg caccagatag gcaagtaagt
gtgtggggat cttcaggaga gcagggggtc atgcttggaa ggcctcaagg ggtcttgctg
                                                                    13320
gctggagcag tgagttcctg tgagaggctg actggggatg aagctcaaat ggtagaaagg
                                                                    13380
                                                                    13440
catcagagag taggggggcc ttgggtaccc cacaaaaagc ctggattctg gactctatcc
tgaaggcaat gggagggctg ctgcaggatt tgagcccaaa gatgacatga cttgagtggc
                                                                    13500
atcttagaaa gtatcaccaa gtaacacaga caggatagct aagaggaggg gttaggctgt
                                                                    13560
                                                                    13620
ggaagaaget aacagggtet caggcaagac aatgtcaggg accatggaaa aataaggaat
                                                                    13680
caatctaaga gacactgtga tggacctgac ttggcaatgg attggccatg gcaggtaaag
aggagagagc tggggacagg aatcttgaac acctttcaga acctcaccct ccaaacacac
                                                                    13740
agttetteet taatgagetg agatgatgtt tetattaagt atcetecete tggeettgee
                                                                    13800
                                                                    13860
aagaaatgat gaaaaatgga ttggatcctg aagctgcctg caggctgctc tccagacatg
                                                                    13920
atcctgcagg catccctggc agacaaggtc attagcctga cagcagggac atgaacatac
tgcttagcaa gctgtggttc ctggttgatg gatgggtaaa atttcaagaa gctgaaatgc
                                                                    13980
caagagagag gggttctggc taattgaatt ttctcataac cgcgtgcaaa ccagcaatct
                                                                    14040
ttaatttcaa ccccggtgca aaacttttct ggaatgtgct cagcttgata aacaacacgc
                                                                    14100
agaacagacc aaagctt
                                                                    14117
      1378
1296
DNA
Homo sapiens
```

60

ccggcgcctg ggttggcgct gcggggcgga ggcggtgtct gagcgccgct ccggctctgc

```
tetetetega getteggeae eegeeegage egetegegeg eeegeeaeet gtetgeeeae
                                                                       120
teggetgtet gtetgeeete eegeegeeag eteetgeete gggeetgeee teteeggtet
                                                                       180
eggtgeteeg aggggegaeg agaagegega eggggeegtg gegeaeeggg eagggegege
                                                                       240
ggggcgcacg gcctgggggc gcacggtgcg gcgccggccc atgaggcttt ccagcgcggg
                                                                       300
gageggeage geeggeegge catggggggt ageetgeggg tggeegttet aggegeeeeg
                                                                       360
ggcgtgggca agacggccat catccgccag ttcctgttcg gtgactaccc cgagcgccac
                                                                       420
eggeceaegg aegggeegeg cetetaeega eeegeggtge tgetegaegg egeegtetae
                                                                       480
gacttgagca teegegaegg egaegteget ggeeeegget egageeeegg gggteeggag
                                                                       540
gagtggccag acgctaagga ctggagcttg caggacacgg acgccttcgt gctcgtctac
                                                                       600
gacatetgea geeeggacag tttegactae gtgaaggeee tgeggeageg categeggag
                                                                       660
accaggcegg egggegee egaagegee atcetegtgg taggcaacaa gegggacagg
                                                                       720
cageggetge getteggaee geggegegeg etggeegeee tagtgegeag gggetggege
                                                                       780
tgcggctacc tcgagtgctc cgccaagtac aactggcacg tgctgcgtct cttccgcgag
                                                                       840
etgetgeget gegetetggt gegegegege eetgeacace eggeeetgeg eetgeagggg
                                                                       900
gegetgeate eegegegetg eagecteatg tgaceegate ggacagtgee atceatggge
                                                                       960
eccaecttgt gaetgggaea ateagggaee tggattggae gggategeee aactteaetg
                                                                      1020
ggactggaca gggaagtete egecetgatt ggatgaggaa ageteeaace eagteteeta
                                                                      1080
agcgactggc ccccttttga acctcattgg acccaaccag gtcccaagct ccattggaga
                                                                      1140
tgaccagtcc tttctgggac ctcaatgggt cacaatccca ttggatggaa aggacttggc
                                                                      1200
tatgaacttg actggaaaca cgcagcctgc tcctggagct tcactggaca tattctttat
                                                                      1260
gccacaccta ccacgggata ataaaaggga aaataa
                                                                      1296
       1379
3360
DNA
Homo sapiens
<\!400\!>-1379 gaatteegge tgtgeegeac egaggegage aggageaggg aacaggtgtt taaaattate
                                                                        60
caactgccat agagctaaat tcttttttgg aaaattgaac cgaacttcta ctgaatacaa
                                                                       120
gatgaaaatg tggttgctgg tcagtcatct tgtgataata tctattacta cctgtttagc
                                                                       180
agagtttaca tggtatagaa gatatggtca tggagtttct gaggaagaca aaggatttgg
                                                                       240
accaattttt gaagagcagc caatcaatac catttatcca gaggaatcac tggaaggaaa
                                                                       300
agteteacte aactgtaggg caegageeag ceettteeeg gtttacaaat ggagaatgaa
                                                                       360
taatggggac gttgatctca caagtgatcg atacagtatg gtaggaggaa accttgttat
                                                                       420
caacaaccct gacaaacaga aagatgctgg aatatactac tgtttagcat ctaataacta
                                                                       480
egggatggte agaageactg aageaaceet gagetttgga tatettgate ettteecace
                                                                       540
tgaggaacgt cctgaggtca gagtaaaaga agggaaagga atggtgcttc tctgtgaccc
                                                                       600
eccataceat tttecagatg atettageta tegetggett etaaatgaat tteetgtatt
                                                                       660
tatcacaatg gataaacggc gatttgtgtc tcagacaaat ggcaatctct acattgcaaa
                                                                       720
tgttgagget teegacaaag geaattatte etgetttgtt teeagteett etattacaaa
                                                                       780
gagcgtgttc agcaaattca tcccactcat tccaatacct gaacgaacaa caaaaccata
                                                                       840
teetgetgat attgtagtte agtteaagga tgtatatgea ttgatgggee aaaatgtgae
                                                                      900
cttagaatgt tttgcacttg gaaatcctgt tccggatatc cgatggcgga aggttctaga
                                                                      960
accaatgeca agcactgetg agattageac etetgggget gttettaaga tetteaatat
                                                                     1020
tcagctagaa gatgaaggca tctatgaatg tgaggctgag aacattagag gaaaggataa
                                                                     1080
acatcaagca agaatttatg ttcaagcatt ccctgagtgg gtagaacaca tcaatgacac
                                                                     1140
agaggtggac ataggcagtg atctctactg gccttgtgtg gccacaggaa agcccatccc
                                                                     1200
tacaatccga tggttgaaaa atggatatgc gtatcataaa ggggaattaa gactgtatga
                                                                     1260
tgtgactttt gaaaatgccg gaatgtatca gtgcatagct gaaaacacat atggagccat
                                                                     1320
ttatgcaaat gctgagttga agatcttggc gttggctcca acttttgaaa tgaatcctat
                                                                     1380
```

```
gaagaaaaag atcctggctg ctaaaggtgg aagggtgata attgaatgca aacctaaagc
                                                                      1440
tgcaccgaaa ccaaagtttt catggagtaa agggacagag tggcttgtca atagcagcag
                                                                      1500
aatactcatt tgggaagatg gtagcttgga aatcaacaac attacaagga atgatggagg
                                                                      1560
tatctataca tgctttgcag aaaataacag agggaaagct aatagcactg gaacccttgt
                                                                      1620
tatcacagat cctacgcgaa ttatattggc cccaattaat gccgatatca cagttggaga
                                                                      1680
aaacgccacc atgcagtgtg ctgcgtcctt tgatcctgcc ttggatctca catttgtttg
                                                                      1740
gtccttcaat ggctatgtga tcgattttaa caaagagaat attcactacc agaggaattt
                                                                      1800
tatgctggat tccaatgggg aattactaat ccgaaatgcg cagctgaaac atgctggaag
                                                                      1860
atacacatgc actgcccaga caattgtgga caattcttca gcttcagctg accttgtagt
                                                                      1920
gagaggccct ccaggccctc caggtggtct gagaatagaa gacattagag ccacttctgt
                                                                      1980
ggcacttact tggagccgtg gttcagacaa tcatagtcct atttctaaat acactatcca
                                                                      2040
gaccaagact attetteag atgactggaa agatgcaaag acagatecee caattattga
                                                                      2100
aggaaatatg gaggcagcaa gagcagtgga cttaatccca tggatggagt atgaattccg
                                                                      2160
cgtggtagca accaatacac tgggtagagg agagcccagt ataccatcta acagaattaa
                                                                      2220
aacagacggt gctgcaccaa atgtggctcc ttcagatgta ggaggtggag gtggaagaaa
                                                                      2280
cagagagetg accataacat gggegeettt gteaagagaa taccactatg geaacaattt
                                                                      2340
tggttacata gtggcattta agccatttga tggagaagaa tggaaaaaag tcacagttac
                                                                      2400
taateetgat aetggeegat atgteeataa agatgaaace atgageeett eeactgeatt
                                                                      2460
tcaagttaaa gtcaaggcct tcaacaacaa aggagatgga ccttacagcc tactagcagt
                                                                      2520
cattaattca gcacaagacg ctcccagtga agccccaaca gaagtaggtg taaaagtctt
                                                                      2580
atcatcttct gagatatctg ttcattggga acatgtttta gaaaaaatag tggaaagcta
                                                                      2640
tcagattcgg tattgggctg cccatgacaa agaagaagct gcaaacagag ttcaagtcac
                                                                      2700
cagccaagag tactcggcca ggctcgagaa ccttctgcca gacacccagt attttataga
                                                                      2760
agtcggggcc tgcaatagtg cagggtgtgg acctccaagt gacatgattg aggctttcac
                                                                      2820
caagaaagca cctcctagcc agcctccaag gatcatcagt tcagtaaggt ctggttcacg
                                                                      2880
ctatataatc acctgggatc atgtcgttgc actatcaaat gaatctacag tgacgggata
                                                                      2940
taaggtactc tacagacctg atggccagca tgatggcaag ctgtattcaa ctcacaaaca
                                                                      3000
ctccatagaa gtcccaatcc ccagagatgg agaatacgtt gtggaggttc gcgcgcacag
                                                                      3060
tgatggagga gatggagtgg tgtctcaagt caaaatttca ggtgcaccca ccctatcccc
                                                                      3120
aagtettete ggettaetge tgeetgeett tggeateett gtetaettgg aattetgaat
                                                                      3180
gtgttgtgac agctgctgtt cccatcccag ctcagaagac acccttcaac cctgggatga
                                                                      3240
ccacaattcc ttccaatttc tgcggctcca tcctaagcca aataaattat actttaacaa
                                                                      3300
actattcaac tgatttacaa cacacatgat gactgaggca ttcaggaacc ccttcatcca
                                                                      3360
       1380
9534
DNA
Homo sapiens
<400> 1380 cagcgactcc tctggctccc gagaagtgga tccggtcgcg gccactacga tgccgggagc
                                                                       60
egeeggggte etecteette tgetgetete eggaggeete gggggegtae aggegeageg
                                                                      120
gccgcagcag cagcggcagt cacaggcaca tcagcaaaga ggtttattcc ctgctqtcct
                                                                      180
gaatcttgct tctaatgctc ttatcacgac caatgcaaca tgtggagaaa aaggacctga
                                                                      240
aatgtactgc aaattggtag aacatgtccc tgggcagcct gtgaggaacc cgcagtgtcg
                                                                      300
aatctgcaat caaaacagca gcaatccaaa ccagagacac ccgattacaa atgctattga
                                                                      360
tggaaagaac acttggtggc agagtcccag tattaagaat ggaatcgaat accattatgt
                                                                      420
gacaattaca ctggatttac agcaggtgtt ccagatcgcg tatgtgattg tgaaggcagc
                                                                      480
taactccccc cggcctggaa actggatttt ggaacgctct cttgatgatg ttgaatacaa
                                                                      540
gccctggcag tatcatgctg tgacagacac ggagtgccta acgctttaca atatttatcc
                                                                      600
ccgcactggg ccaccgtcat atgccaaaga tgatgaggtc atctgcactt cattttactc
                                                                      660
```

```
caagatacac cccttagaaa atggagagat tcacatctct ttaatcaatg ggagaccaag
                                                                      720
tgccgatgat cettetecag aactgetaga atttacetee getegetata ttegeetgag
                                                                      780
atttcagagg atccgcacac tgaatgctga cttgatgatg tttgctcaca aagacccaag
                                                                      840
agaaattgac cccattgtca ccagaagata ttactactcg gtcaaggata tttcagttgg
                                                                      900
agggatgtgc atctgctatg gtcatgccag ggcttgtcca cttgatccag cgacaaataa
                                                                      960
atctcgctgt gagtgtgagc ataacacatg tggcgatagc tgtgatcagt gctgtccagg
                                                                     1020
attocatcag aaaccotgga gagotggaac ttttctaact aaaactgaat gtgaagcatg
                                                                     1080
caattgtcat ggaaaagctg aagaatgcta ttatgatgaa aatgttgcca gaagaaatct
                                                                     1140
gagtttgaat atacgtggaa agtacattgg agggggtgtc tgcattaatt gtacccaaaa
                                                                     1200
cactgctggt ataaactgcg agacatgtac agatggcttc ttcagaccca aaggggtatc
                                                                     1260
tecaaattat ecaaggeeat geeageeatg teattgegat ecaattggtt cettaaatga
                                                                     1320
agtotgtgtc aaggatgaga aacatgotog acgaggtttg gcacctggat cotgtoattg
                                                                     1380
caaaactggt tttggaggtg tgagctgtga tcggtgtgcc aggggctaca ctggctaccc
                                                                     1440
ggactgcaaa gcctgtaact gcagtgggtt agggagcaaa aatgaggatc cttgttttgg
                                                                     1500
cccctgtatc tgcaaggaaa atgttgaagg aggagactgt agtcgttgca aatccggctt
                                                                     1560
cttcaatttg caagaggata attggaaagg ctgcgatgag tgtttctgtt caggggtttc
                                                                     1620
aaacagatgt cagagttect actggaceta tggcaaaata caagatatga gtggctggta
                                                                     1680
tetgaetgae etteetggee geattegagt ggeteeceag eaggaegaet tggaeteace
                                                                     1740
teageagate ageateagta acgeggagge eeggeaagee etgeegeaca getactaetg
                                                                     1800
gagegegeeg geteectate tgggaaacaa acteecagea gtaggaggae agttgacatt
                                                                     1860
taccatatca tatgaccttg aagaagagga agaagataca gaacgtgttc tccagcttat
                                                                     1920
gattatetta gagggtaatg aettgageat cageacagee caagatgagg tgtacetgea
                                                                     1980
cccatctgaa gaacatacta atgtattgtt acttaaagaa gaatcattta ccatacatgg
                                                                     2040
cacacatttt ccagtccgta gaaaggaatt tatgacagtg cttgcgaatt tgaagagagt
                                                                     2100
cctcctacaa atcacataca gctttgggat ggatgccatc ttcaggttga gctctgttaa
                                                                     2160
cettgaatee getgteteet atectaetga tggaageatt geageagetg tagaagtgtg
                                                                     2220
teagtgeeca ecagggtata etggeteete ttgtgaatet tgttggeeta ggeacaggeg
                                                                     2280
agttaacggc actatttttg gtggcatctg tgagccatgt cagtgctttg gtcatgcgga
                                                                     2340
gtcctgtgat gacgtcactg gagaatgcct gaactgtaag gatcacacag gtggcccata
                                                                     2400
ttgtgataaa tgtcttcctg gtttctatgg cgagcctact aaaggaacct ctgaagactg
                                                                     2460
tcaaccctgt gcctgtccac tcaatatccc atccaataac tttagcccaa cgtgccattt
                                                                     2520
agaccggagt cttggattga tctgtgatgg atgccctgtc gggtacacag gaccacgctg
                                                                     2580
tgagaggtgt gcagaaggct attttggaca accetetgta cetggaggat catgtcagec
                                                                     2640
atgccaatgc aatgacaacc ttgacttctc catccctggc agctgtgaca gcttgtctgg
                                                                     2700
ctcctgtctg atatgtaaac caggtacaac aggccggtac tgtgagctct gtgctgatgg
                                                                     2760
atattttgga gatgcagttg atgcgaagaa ctgtcagccc tgtcgctgta atgccggtgg
                                                                     2820
ctctttctct gaggtttgcc acagtcaaac tggacagtgt gagtgcagag ccaacgttca
                                                                     2880
gggtcagaga tgtgacaaat gcaaggctgg gacctttggc ctacaatcag caaggggctg
                                                                     2940
tgttccctgc aactgcaatt cttttgggtc taagtcattc gactgtgaag agagtggaca
                                                                     3000
atgttggtgc caacctggag tcacagggaa gaaatgtgac cgctgtgccc acggctattt
                                                                     3060
caacttccaa gaaggaggct gcacagcttg tgaatgttct catctgggta ataattgtga
                                                                     3120
cccaaagact gggcgatgca tttgcccacc caataccatt ggagagaaat gttctaaatg
                                                                     3180
tgcacccaat acctggggcc acagcattac cactggttgt aaggcttgta actgcagcac
                                                                     3240
agtgggatcc ttggatttcc aatgcaatgt aaatacaggc caatgcaact gtcatccaaa
                                                                     3300
attetetggt geaaaatgta eagagtgeag tegaggteae tggaaetaee etegetgeaa
                                                                     3360
tetetgtgae tgetteetee etgggaeaga tgeeacaaee tgtgatteag agaetaaaaa
                                                                     3420
atgctcctgt agtgatcaaa ctgggcagtg cacttgtaag gtgaatgtgg aaggcatcca
                                                                     3480
```

```
ctgtgacaga tgccggcctg gcaaattcgg actcgatgcc aagaatccac ttggctgcag
                                                                     3540
cagctgctat tgcttcggca ctactaccca gtgctctgaa gcaaaaggac tgatccggac
                                                                     3600
gtgggtgact ctgaaggctg agcagaccat tctacccctg gtagatgagg ctctgcagca
                                                                     3660
cacgaccacc aagggcattg tttttcaaca tccagagatt gttgcccaca tggacctgat
                                                                     3720
gagagaagat ctccatttgg aaccttttta ttggaaactt ccagaacaat ttgaaggaaa
                                                                     3780
gaagttgatg gcctatgggg gcaaactcaa gtatgcaatc tatttcgagg ctcgggaaga
                                                                     3840
aacaggtttc tctacatata atcctcaagt gatcattcga ggtgggacac ctactcatgc
                                                                     3900
tagaattate gteaggeata tggetgetee tetgattgge caattgaeaa ggeatgaaat
                                                                     3960
tgaaatgaca gagaaagaat ggaaatatta tggggatgat cctcgagtcc atagaactgt
                                                                     4020
gacccgagaa gacttettgg atatactata tgatatteat tacattetta teaaagetae
                                                                     4080
ttatggaaat ttcatgcgac aaagcaggat ttctgaaatc tcaatggagg tagctgaaca
                                                                     4140
aggacgtgga acaacaatga ctcctccagc tgacttgatt gaaaaatgtg attgtcccct
                                                                     4200
gggetattet ggeetgteet gtgaggeatg ettgeeggga ttttategae tgegttetea
                                                                     4260
accaggtggc cgcacccctg gaccaaccct gggcacctgt gttccatgtc aatgtaatgg
                                                                     4320
acacagcagc ctgtgtgacc ctgaaacatc gatatgccag aattgtcaac atcacactgc
                                                                     4380
tggtgacttc tgtgaacgat gtgctcttgg atactatgga attgtcaagg gattgccaaa
                                                                     4440
tgactgtcag caatgtgcct gccctctgat ttcttccagt aacaatttca gcccctcttg
                                                                     4500
tgtcgcagaa ggacttgacg actaccgctg cacggcttgt ccacggggat atgaaggcca
                                                                     4560
gtactgtgaa aggtgtgccc ctggctatac tggcagtcca ggcaaccctg gaggctcctg
                                                                     4620
ccaagaatgt gagtgtgatc cctatggctc actgcctgtg ccctgtgacc ctgtcacagg
                                                                     4680
attctgcacg tgccgacctg gagccacggg aaggaagtgt gacggctgca agcactggca
                                                                     4740
tgcacgcgag ggctgggagt gtgttttttg tggagatgag tgcactggcc ttcttctcgg
                                                                     4800
tgacttggct cgcctggagc agatggtcat gagcatcaac ctcactggtc cgctgcctgc
                                                                     4860
gccatataaa atgctgtatg gtcttgaaaa tatgactcag gagctaaagc acttgctgtc
                                                                     4920
acctcagegg geeccagaga ggettattea getggeagag ggeaatetga atacaetegt
                                                                     4980
gaccgaaatg aacgagctgc tgaccagggc taccaaagtg acagcagatg gcgagcagac
                                                                     5040
cggacaggat gctgagagga ccaacacaag agcaaagtcc ctgggagaat tcattaagga
                                                                     5100
gcttgcccgg gatgcagaag ctgtaaatga aaaagctata aaactaaatg aaactctagg
                                                                     5160
aactcgagac gaggcctttg agagaaattt ggaagggctt cagaaagaga ttgaccagat
                                                                     5220
gattaaagaa ctgaggagga aaaatctaga gacacaaaag gaaattgctg aagatgagtt
                                                                     5280
ggtagctgca gaagcccttc tgaaaaaagt gaagaagctg tttggagagt cccgggggga
                                                                     5340
aaatgaagaa atggagaagg atctccggga aaaactggct gactacaaaa acaaagttga
                                                                     5400
tgatgcttgg gaccttttga gagaagccac agataaaatc agagaagcta atcgcctatt
                                                                     5460
tgcagtaaat cagaaaaaca tgactgcatt ggagaaaaag aaggaggctg ttgagagcqq
                                                                     5520
caaacgacaa attgagaaca ctttaaaaga aggcaatgac atactcgatg aagccaaccg
                                                                     5580
tcttgcagat gaaatcaact ccatcataga ctatgttgaa gacatccaaa ctaaattgcc
                                                                     5640
acctatgtct gaggagctta atgataaaat agatgacctc tcccaagaaa taaaggacag
                                                                     5700
gaagettget gagaaggtgt ceeaggetga gageeacgea geteagttga atgaeteate
                                                                     5760
tgctgtcctt gatggaatcc ttgatgaggc taaaaacatc tccttcaatg ccactgcagc
                                                                     5820
cttcaaagct tacagcaata ttaaggacta tattgatgaa gctgagaaag ttgccaaaga
                                                                     5880
agccaaagat cttgcacatg aagctacaaa actggcaaca ggtcctcggg gtttattaaa
                                                                     5940
ggaagatgcc aaaggctgtc ttcagaaaag cttcaggatt cttaacgaag ccaagaagtt
                                                                     6000
agcaaatgat gtaaaagaaa atgaagacca tctaaatggc ttaaaaacca ggatagaaaa
                                                                     6060
tgctgatgct agaaatgggg atctcttgag aactttgaat gacactttgg gaaagttatc
                                                                     6120
agetatteca aatgatacag etgetaaaet geaagetgtt aaggacaaag eeagacaage
                                                                     6180
caacgacaca gctaaagatg tactggcaca gattacagag ctccaccaga acctcgatgg
                                                                     6240
cctgaagaag aattacaata aactagcaga cagcgtcgcc aaaacgaatg ctgtggttaa
                                                                     6300
agateettee aagaacaaaa teattgeega tgeagatgee aetgteaaaa atttagaaca
                                                                     6360
```

ggaagctgac cggctaatag ataaactcaa acccatcaag gaacttgagg ataacctaaa 6420 gaaaaacatc tctgagataa aggaattgat aaaccaagct cggaaacaag ccaattctat 6480 caaagtatct gtgtcttcag gaggtgactg cattcgaaca tacaaaccag aaatcaagaa 6540 aggaagttac aataatattg ttgtcaacgt aaagacagct gttgctgata acctcctctt 6600 ttatcttgga agtgccaaat ttattgactt tctggctata gaaatgcgta aaggcaaagt 6660 cagetteete tgggatgttg gatetggagt tggaegtgta gagtaeecag atttgaetat 6720 tgatgactca tattggtacc gtatcgtagc atcaagaact gggagaaatg gaactatttc 6780 tgtgagagcc ctggatggac ccaaagccag cattgtgccc agcacacacc attcgacgtc 6840 teeteeaggg tacacgatte tagatgtgga tgeaaatgea atgetgtttg ttggtggeet 6900 gactgggaaa ttaaagaagg ctgatgctgt acgtgtgatt acattcactg gctgcatggg 6960 agaaacatac tttgacaaca aacctatagg tttgtggaat ttccgagaaa aagaaggtga 7020 ctgcaaagga tgcactgtca gtcctcaggt ggaagatagt gaggggacta ttcaatttga 7080 tggagaaggt tatgcattgg tcagccgtcc cattcgctgg taccccaaca tctccactgt 7140 catgttcaag ttcagaacat tttcttcgag tgctcttctg atgtatcttg ccacacgaga 7200 cctgagagat ttcatgagtg tggagctcac tgatgggcac ataaaagtca gttacgatct 7260 gggctcagga atggcttccg ttgtcagcaa tcaaaaccat aatgatggga aatggaaatc 7320 attcactctg tcaagaattc aaaaacaagc caatatatca attgtagata tagatactaa 7380 tcaggaggag aatatagcaa cttcgtcttc tggaaacaac tttggtcttg acttgaaagc 7440 agatgacaaa atatattttg gtggcctgcc aacgctgaga aacttgagta tgaaagcaag 7500 gccagaagta aatctgaaga aatattccgg ctgcctcaaa gatattgaaa tttcaagaac 7560 tccgtacaat atactcagta gtcccgatta tgttggtgtt accaaaggat gttccctgga 7620 gaatgtttac acagttaget tteetaagee tggttttgtg gageteteee etgtgeeaat 7680 tgatgtagga acagaaatca acctgtcatt cagcaccaag aatgagtccg gcatcattct 7740 tttgggaagt ggagggacac cagcaccacc taggagaaaa cgaaggcaga ctggacaggc 7800 ctattatgta atactcctca acaggggccg tctggaagtg catctctcca caggggcacg 7860 aacaatgagg aaaattgtca tcagaccaga gccgaatctg tttcatgatg gaagagaaca 7920 ttccgttcat gtagagcgaa ctagaggcat ctttacagtt caagtggatg aaaacagaag 7980 atacatgcaa aacctgacag ttgaacagcc tatcgaagtt aaaaagcttt tcgttggggg 8040 tgctccacct gaatttcaac cttccccact cagaaatatt cctccttttg aaggctqcat 8100 atggaatett gttattaaet etgteeceat ggaetttgea aggeetgtgt eetteaaaa 8160 tgctgacatt ggtcgctgtg cccatcagaa actccgtgaa gatgaagatg gagcaqctcc 8220 agctgaaata gttatccagc ctgagccagt tcccacccca gcctttccta cgcccacccc 8280 agttctgaca catggtcctt gtgctgcaga atcagaacca gctcttttga tagggagcaa 8340 gcagttcggg ctttcaagaa acagtcacat tgcaattgca tttgatgaca ccaaagttaa 8400 aaaccgtctc acaattgagt tggaagtaag aaccgaagct gaatccggct tgctttttta 8460 catggctgcg atcaatcatg ctgattttgc aacagttcag ctgagaaatg gattgcccta 8520 cttcagctat gacttgggga gtggggacac ccacaccatg atccccacca aaatcaatga 8580 tggccagtgg cacaagatta agataatgag aagtaagcaa gaaggaattc tttatgtaga 8640 tggggcttcc aacagaacca tcagtcccaa aaaagccgac atcctggatg tcgtgggaat 8700 gctgtatgtt ggtgggttac ccatcaacta cactacccga agaattggtc cagtgaccta 8760 tagcattgat ggctgcgtca ggaatctcca catggcagag gcccctgccg atctggaaca 8820 acccacctcc agcttccatg ttgggacatg ttttgcaaat gctcagaggg gaacatattt 8880 tgacggaacc ggttttgcca aagcagttgg tggattcaaa gtgggattgg accttcttgt 8940 agaatttgaa ttcgcgacaa ctacaacgac tggagttctt ctgggggatca gtagtcaaaa 9000 aatggatgga atgggtattg aaatgattga tgaaaagttg atgtttcatg tggacaatgg 9060 tgcgggcaga ttcactgctg tctatgatgc tggggttcca gggcatttgt gtgatggaca 9120 atggcataaa gtcactgcca acaagatcaa acaccgcatt gagctcacag tcgatgggaa 9180

```
ccaggtggaa gcccaaagcc caaacccagc atctacatca gctgacacaa atgaccctgt
                                                                     9240
 gtttgttgga ggcttcccag atgacctcaa gcagtttggc ctaacaacca gtattccgtt
                                                                     9300
 ccgaggttgc atcagatccc tgaagctcac caaaggcaca gcaagccact ggaggttaat
                                                                     9360
 tttgccaagg ccctggaact gaggggcgtt caacctgtat catgcccagc caactaataa
                                                                     9420
aaataagtgt aaccccagga agagtctgtc aaaacaagta tatcaagtaa aacaaacaaa
                                                                     9480
tatattttac ctatatatgt taattaaact aatttgtgca tgtacataga attc
                                                                     9534
       1381
806
DNA
       Homo sapiens
<400> 1381 tececteece accacagetg tagtgeagte cacegtetee agtggetatg geggtgecag
                                                                       60
cggtgtcggc agtggcttag gcctgggtgg aggaagcagc tactcctatg gcagtggtct
                                                                      120
tggcgttgga ggcggcttta gttccagcag cggcagagcc actgggggtg gcctcagctc
                                                                      180
tgttggaggc ggcagttcca ccatcaagta caccaccacc tcctcctaca gcaggaagag
                                                                      240
ctacaagcac tgaagctgtg ccgccagctc tcagtcccac agctctcagg cccctctctg
                                                                      300
gcagcagage cetetectea ggttgettgt ceteceetgg cetecagtet eccetgeeet
                                                                      360
cccgggtaga gctgggatgc cctcactttt cttctcatca atactgttcc actgagctcc
                                                                      420
tgttgcttac catcaagtca acagttatca gcactcagac atgcgaatgt cctttttagt
                                                                      480
tecegtatta ttacaggtat etgagtetge cataattetg agaagaaaaa tgacetatat
                                                                      540
eccecataag aactgaaact cagtetagga gtteteatet gacaagteag ttgteetgat
                                                                      600
cttctcttgc agtgtcctga atggcaagta gtgtaccttc tagtgcagtc tgcattcctg
                                                                      660
cactgettte tetgetetet ttgeettett ttgttetgtg tgaataaage atattgagaa
                                                                      720
tgtgaacatg ttgtgttaga ttgtattgct gaccacttcc tggtttagaa acattcgcac
                                                                      780
cccacaaatg gtttcttatc tttggg
                                                                      806
       ĎŇĂ
Homo sapiens
<400> 1382
aattcggaga acctgctaca ggaacagctg caggcagaga cagagctgta tgcagaggct
                                                                      60
gaggagatgc gggtgcggct ggcggccaag aagcaggagc tggaggagat actgcatgag
                                                                     120
atggaggccc gcctggagga ggaggaagac aggggccagc agctacaggc tgaaaggaag
                                                                     180
aagatggccc agcagatgct ggaccttgaa gaacagctgg aggaggagga agctgccagg
                                                                     240
cagaagctgc aacttgagaa ggtcacggct gaggccaaga tcaagaaact ggaggatgag
                                                                     300
atcctggtca tggatgatca gaacaataaa ctatcaaaag aacgaaaact ccttgaggag
                                                                     360
aggattagtg acttaacgac aaatcttgca gaagaggaag aaaaggccaa gaatcttacc
                                                                     420
aagctgaaaa acaagcatga atctatgatt tcagaactgg aagtgcggct aaagaaggaa
                                                                     480
gagaagagcc gacaggagct ggagaagctg aaacggaagc tggagggtga tgccagcgac
                                                                     540
ttccacgagc agatcgctga cctccaggcg cagatcgcag agctcaagat gcagctggcc
                                                                     600
aagaaggagg aggagctgca ggcggccctg gccaggcttg acgatgaaat cgctcagaag
                                                                     660
aacaatgccc tgaagaagat ccgggagctg gagggccaca tctcagacct ccaggaggac
                                                                     720
ctggactcag agcgggccgc caggaacaag gctgaaaagc agaagcgaga cctcggcgag
                                                                     780
840
gagctcaggg ccaagaggga gcaggaggtg acggtgctga agaaggccct ggatgaagag
                                                                     900
acgcggtccc atgaggctca ggtccaggag atgaggcaga aacacgcaca ggcggtggag
                                                                     960
gagctcacag agcagcttga gcagttcaag agggccaagg cgaacctaga caagaataag
                                                                    1020
cagacgctgg agaaagagaa cgcagacctg gccggggagc tgcgggtcct gggccaggcc
                                                                    1080
aagcaggagg tggaacataa gaagaagaag ctggaggcgc aggtgcagga gctgcagtcc
                                                                    1140
aagtgcagcg atggggagcg ggcccgggcg gagctcaatg acaaagtcca caagctgcag
                                                                    1200
aatgaagttg agagcgtcac agggatgctt aacgaggccg aggggaaggc cattaagctg
                                                                    1260
```

```
gccaaggacg tggcgtccct cagttcccag ctccaggaca cccaggagtt gcttcaagaa
                                                                    1320
 gaaacccggc agaagctcaa cgtgtctacg aagctgcgcc agctggagga ggagcggaac
                                                                    1380
 agcctgcaag accagctgga cgaggagatg gaggccaagc agaacctgga gcgccacatc
                                                                    1440
 tccactctca acatccagct ctccgactcg aagaagaagc tgcaggactt tgccagcacc
                                                                    1500
 gtggaagctc tggaagaggg gaagaagagg ttccagaagg agatcgagaa cctcacccag
                                                                    1560
 cagtacgagg agaaggcggc cgcttatgat aaactggaaa agaccaagaa caggcttcag
                                                                    1620
 caggagetgg acgaectggt tgttgatttg gacaaccage ggcaactegt gtecaacetg
                                                                    1680
gaaaagaagc agaggaaatt tgatcagttg ttagccgagg agaaaaacat ctcttccaaa
                                                                    1740
 tacgcggatg agagggacag agctgaggca gaagccaggg agaaggaaac caaggccctg
                                                                    1800
tecetggete gggeeettga agaggeettg gaagceaaag aggaactega geggaeeaac
                                                                    1860
aaaatgctca aagccgaaat ggaagacctg gtcagctcca aggatgacgt gggcaagaac
                                                                    1920
gtccatgagc tggagaagtc caagcgggcc ctggagaccc agatggagga gatgaagacg
                                                                    1980
cagctggaag agctggagga cgagctgcaa gcctcggagg acgccaaact gcggctggaa
                                                                    2040
gtcaacatgc aggcgctcaa gggccagttc gaaagggatc tccaagcccg ggacgagcag
                                                                    2100
aatgaggaga agaggaggca actgcagaga cagcttcacg agtatgagac ggaactggaa
                                                                    2160
gacgagcgaa acgaacgtgc cctggcagct gcagcaaaga agaagctgga aggggacctg
                                                                    2220
aaagacctgg agcttcaggc cgactctgcc atcaagggga gggaggaagc catcaagcag
                                                                    2280
ctacgcaaac tgcaggctca gatgaaggac tttcaaagag agctggaaga tgcccgtgcc
                                                                    2340
tccagagatg agatctttgc cacagccaaa gagaatgaga agaaagccaa gagcttggaa
                                                                    2400
gcagacetea tgcagetaca agaggacete geegeegetg agagggeteg caaacaageg
                                                                    2460
gacctcgaga aggaggaact ggcagaggag ctggccagta gcctgtcggg aaggaacgca
                                                                    2520
ctccaggacg agaagcgccg cctggaggcc cggatcgccc agctggagga ggagctggag
                                                                    2580
gaggagcagg gcaacatgga ggccatgagc gaccgggtcc gcaaagccac acagcaggcc
                                                                    2640
gagcagetea geaacgaget ggecacagag egcageaegg eccagaagaa tgagagtgee
                                                                    2700
cggcagcagc tcgagcggca gaacaaggag ctccggagca agctccacga gatggaggg
                                                                    2760
gccgtcaagt ccaagttcaa gtccaccatc gcggcgctgg aggccaagat tgcacagctg
                                                                    2820
gaggagcagg tcgagcagga ggccagagag aaacaggcag ccaccaagtc gctgaagcag
                                                                    2880
aaagacaaga agctgaagga aatcttgctg caggtggagg acgagcgcaa gatggccgag
                                                                    2940
cagtacaagg agcaggcaga gaaaggcaat gccagggtca agcagctcaa gaggcagctg
                                                                    3000
gaggaggcag aggaggagtc ccagcgcatc aacgccaacc gcaggaagct gcagcgggag
                                                                    3060
ctggatgagg ccacggagag caacgaggcc atgggccgtg aggtgaacgc actcaagagc
                                                                    3120
aagctcagag ggcccccccc acaggaaact tcgcagtgat gcaccaggcg aggaaacgag
                                                                    3180
acctctttcg ttccttctag aaggtctgga ggacgtagag ttattgaaaa tgcagatggt
                                                                    3240
tetgaggagg aactggacae tegagaegea gaetteaatg gaaccaagge cagtgaataa
                                                                    3300
3360
aaaaacccaa caacaacccg aacaagac
                                                                    3388
       Homo sapiens
<400> 1383
gatcccatcg cagctaccgc gatgagaggc gctcgcggcg cctgggattt tctctgcgtt
                                                                     60
ctgctcctac tgcttcgcgt ccagacaggc tcttctcaac catctgtgag tccaggggaa
                                                                    120
ccgtctccac catccatcca tccaggaaaa tcagacttaa tagtccgcgt gggcgacgag
                                                                    180
attaggctgt tatgcactga tccgggcttt gtcaaatgga cttttgagat cctggatgaa
                                                                    240
acgaatgaga ataagcagaa tgaatggatc acggaaaagg cagaagccac caacaccggc
                                                                    300
aaatacacgt gcaccaacaa acacggctta agcaattcca tttatgtgtt tgttagagat
                                                                    360
cctgccaage ttttccttgt tgaccgctcc ttgtatggga aagaagacaa cgacacgctg
                                                                    420
gtccgctgtc ctctcacaga cccagaagtg accaattatt ccctcaaggg gtgccagggg
                                                                    480
```

aagcctcttc	ccaaggactt	gaggtttatt	cctgacccca	aggcgggcat	catgatcaaa	540
	gcgcctacca					600
	cggaaaaatt					660
	ccaaagcaag					720
	atgtgtctag					780
					acgtcaggca	840
	tcagttcagc					900
	gatcagcaaa					960
					tgtagatttg	1020
					tatgaacaga	1080
	ataaatggga					1140
					cacattccta	1200
					tacaaaacca	1260
	cttacgacag					1320
	caatagattg					1380
	tggatgtgca					1440
	ctatagattc					1500
	tgggcaagac					1560
	atccccacac					1620
	gcattattgt					1680
	ggaaggttgt					1740
	cttatgatca					1800
	ctggagcttt					1860
	ccatgactgt					1920
	tcatgtctga					1980
	ttggagcctg					2040
	atcttttgaa					2100
	atgcagaagc				-	2160
	gtactaatga					2220
	acaaaaggag					2280
	tggaggatga					2340
	caaagggcat atatcctcct					2400
	tcaagaatga					2460
	cacctgaaag					2520 2580
	tttttctttg					2640
	ctaagttcta					2700
	ctgaaatgta					2760
	tcaagcaaat					2820
	ccaacttagc					2880
	tcaattctgt					2940
	gagcagaatc					3000
	tggttatttt					3060
	atcctgtctt					3120
	ttgcaaaggt					3180
atgaacagaa						3240
cctttccaag						3300
_		_			J	

```
ggtagtaatc acagttggcc ttcagaacca tccatagtag tatgatgata caagattaga
                                                                    3360
agctgaaaac ctaagtcctt tatgtggaaa acagaacatc attagaacaa aggacagagt
                                                                    3420
atgaacacct gggcttaaga aatctagtat ttcatgctgg gaatgagaca taggccatga
                                                                    3480
aaaaaatgat ccccaagtgt gaacaaaaga tgctcttctg tggaccactg catgagcttt
                                                                    3540
tatactaccg acctggtttt taaatagagt ttgctattag agcattgaat tggagagaag
                                                                    3600
gcctccctag ccagcacttg tatatacgca tctataaatt gtccgtgttc atacatttga
                                                                    3660
ggggaaaaca ccataaggtt tcgtttctgt atacaaccct ggcattatgt ccactgtgta
                                                                    3720
tagaagtaga ttaagagcca tataagtttg aaggaaacag ttaataccat tttttaagga
                                                                    3780
aacaatataa ccacaaagca cagtttgaac aaaatctcct cttttagctg atgaacttat
                                                                    3840
tetgtagatt etgtggaaca ageetateag etteagaatg geattgtaet eaatggattt
                                                                    3900
gatgctgttt gacaaagtta ctgattcact gcatggctcc cacaggagtg ggaaaacact
                                                                    3960
gccatcttag tttggattct tatgtagcag gaaataaagt ataggtttag cctccttcgc
                                                                    4020
aggcatgtcc tggacaccgg gccagtatct atatatgtgt atgtacgttt gtatgtgtgt
                                                                    4080
agacaaatat ttggaggggt atttttgccc tgagtccaag agggtccttt agtacctgaa
                                                                    4140
aagtaacttg gettteatta ttagtactge tettgtttet ttteacatag etgtetagag
                                                                    4200
tagettacea gaagetteea tagtggtgea gaggaagtgg aaggeateag teeetatgta
                                                                    4260
tttgcagttc acctgcactt aaggcactct gttatttaga ctcatcttac tgtacctgtt
                                                                    4320
ccttagacct tccataatgc tactgtctca ctgaaacatt taaattttac cctttagact
                                                                    4380
4440
aactcccctt cctcactgcc caatataaaa ggcaaatgtg tacatggcag agtttgtgtg
                                                                    4500
ttgtcttgaa agattcaggt atgttgcctt tatggtttcc cccttctaca tttcttagac
                                                                    4560
tacatttaga gaactgtggc cgttatctgg aagtaaccat ttgcactgga gttctatgct
                                                                    4620
etegeaectt tecaaagtta acagattttg gggttgtgtt gtcacccaag agattgttgt
                                                                    4680
ttgccatact ttgtctgaaa aattcctttg tgtttctatt gacttcaatg atagtaagaa
                                                                    4740
aagtggttgt tagttataga tgtctaggta cttcaggggc acttcattga gagttttgtc
                                                                    4800
ttgccatact ttgtctgaaa aattcctttg tgtttctatt gacttcaatg atagtaagaa
                                                                    4860
aagtggttgt tagttataga tgtctaggta cttcaggggc acttcattga gagttttgtc
                                                                    4920
aatgtetttt gaatatteee aageeeatga gteettgaaa atattttta tatataeagt
                                                                    4980
aactttatgt gtaaatacat aagcggcgta agtttaaagg atgttggtgt tccacgtgtt
                                                                    5040
ttattcctgt atgttgtcca attgttgaca gttctgaaga attc
                                                                    5084
      1384
655
DNA
Homo sapiens
<400> 1384 ccaatggcca ttagccttca cccatccgca cgacctcatt tacatcccct attcttatca
                                                                      60
tettecagae cacetegaga gecaggggtt cagageceet etttectaat gagggeteee
                                                                     120
aggacaggat gaggtgcctg cctgaggtca cacggcaggg agtgcagctc cccctgcccc
                                                                     180
gacctgctga gccccatcac ttccgcagat cctggcattc tctcagaagc tgtactacga
                                                                     240
caaggaacag acagtgagca tgaaggacaa tgtcaggccc ctgcagcagc tggggcagcq
                                                                     300
cacggtgata aagtccgggg ccccgggtcg gccgctgccc tgggccctgc ctgccctgct
                                                                     360
gggccccatg ctggcctgcc tgctggccgg cttcctgcga tgatggctca cttctgcacg
                                                                     420
cageetetet gttgeeteag etetecaagt tecaggette eggteettag eetteceagg
                                                                     480
tgggacttta ggcatgatta aaatatggac atatttttgg agaaaccttt ctcaagtgtg
                                                                     540
tttttagcct tccacacta ccccacctg tccccctcca cccacccctg ttcctcctqt
                                                                     600
tccagggcgg gggctttaag gccaggagat ttctccaagc aggtaccacc aggtg
                                                                     655
      1385
2130
DNA
Homo sapiens
```

<400> 1385							
	gc agcggctggg tagcagcacg tctcttgctc 60						
ctcagggcca ctgccaggct tgccgagt	cc tgggactgct ctcgctccgg ctgccactct 120						
cccgcgctct cctagctccc tgcgaagc	ag gatggccggg accgtgcgca ccgcgtgctt 180						
ggtggtggcg atgctgctca gcttggac	tt cccgggacag gcgcagcccc cgccgccgcc 240						
gccggacgcc acctgtcacc aagtccgc	tc cttcttccag agactgcagc ccggactcaa 300						
gtgggtgcca gaaactcccg tgccagga	tc agatttgcaa gtatgtctcc ctaagggccc 360						
aacatgctgc tcaagaaaga tggaagaa	aa ataccaacta acagcacgat tgaacatgga 420						
	ct caagttetta attatteaga atgetgeggt 480						
tttccaagag gcctttgaaa ttgttgtt	cg ccatgccaag aactacacca atgccatgtt 540						
	ca agettttgag tttgtgggtg aatttttcae 600						
agatgtgtct ctctacatct tgggttct	ga catcaatgta gatgacatgg tcaatgaatt 660						
	ac ccagctaatg aacccaggcc tgcctgattc 720						
	gg agcaagacgt gacctgaaag tatttgggaa 780						
	tc caagtcactg caagtcacta ggatcttcct 840						
tcaggctctg aatcttggaa ttgaagtg	at caacacaact gatcacctga agttcagtaa 900						
	tg gtactgctct tactgccagg gactgatgat 960						
ggttaaaccc tgtggcggtt actgcaat	gt ggtcatgcaa ggctgtatgg caggtgtggt 1020						
	at tetgteeett gaagaacttg tgaatggeat 1080						
	ct gcttggtctc ttttcaacaa tccatgattc 1140						
	aa gctgaccacc actattggca agttatgtgc 1200						
	gc ttattatcct gaagatctct ttattgacaa 1260						
	ca tgaagaaacc ttatccagcc gaagaaggga 1320						
	ag cttctatagt gctttgcctg gctacatctg 1380						
	ac cetttgetgg aatggacaag aactegtgga 1440						
	gg aatgaaaaac cagttcaatc tccatgagct 1500						
	ag tcaaattatt gacaaactga agcacattaa 1560						
	aa aggtagagtt ctggataaaa acctggatga 1620						
	ga tgatgaagat gagtgcattg gaggctctgg 1680						
	ct ccgcttcctt gcagaactgg cctatgatct 1740						
	ca gcaggcaact ccgaaggaca acgagataag 1800						
	tc cccgctgaag cttctcacca gcatggccat 1860						
	ca ctgactgcct ggtgcccagc acatgtgctg 1920						
	ta aagggaacca ctttcttatt tttttctatt 1980						
	ct ccagccatga agtagaggac taaccatgtg 2040						
	tt tggaggaaga tacattttag tggtagcata 2100						
tagattgtcc ttttgcaaaa aaaaaaac	cg 2130						
<210> 1386 <211> 2298							
<212> DNA							
<213> Homo sapiens <400> 1386							
gggaggtgtc gcagcgccat caagaagg	ac tgaggctccg caatcggagg ccgccgattt 60						
cgaccettcg ceteggeeeg geeeaate	ca ggccccggcc cgccgcccc ggccgccccc 120						
gcgtgccctc tctcctccct ctttgtgc	gt ctcgcgccgc cgccgcccgc cgcgtgagag 180						
gacgggctcc gcgcgctccg gcagccga	tt cgggtcccct cccccggga ggcttgcgaa 240						
	tg ceggtgeetg teeceggggg geecatggeg 300						
accggagcga acgccacgcc gttggact	tc ccaagtaaga agcggaagag gagccgctgg 360						
	tg attccaggaa tgcctacagt tattccccct 420						
ggacttactc gagaacaaga aagagctt	at atagtgcaac tgcagataga agacctgact 480						

```
cgtaaactgc gcacaggaga cctgggcatc ccccctaacc ctgaggacag gtccccttcc
                                                                      540
cctgagccca tctacaatag cgaggggaag cggcttaaca cccgagagtt ccgcacccgc
                                                                      600
aaaaagetgg aagaggageg geacaaeete ateacagaga tggttgeaet caateeggat
                                                                      660
ttcaagccac ctgcagatta caaacctcca gcaacacgtg tgagtgataa agtcatgatt
                                                                      720
ccacaagatg agtacccaga aatcaacttt gtggggctgc tcatcgggcc cagagggaac
                                                                       780
accetgaaga acatagagaa ggagtgeaat geeaagatta tgateegggg gaaagggtet
                                                                       840
gtgaaagaag ggaaggttgg gcgcaaagat ggccagatgt tgccaggaga agatgagcca
                                                                       900
cttcatgccc tggttactgc caatacaatg gagaacgtca aaaaggcagt ggaacagata
                                                                      960
agaaacatcc tgaagcaggg tatcgagact ccagaggacc agaatgatct acggaagatg
                                                                     1020
cagcttcggg agttggctcg cttaaatggg acccttcggg aagacgataa caggatctta
                                                                     1080
agaccctggc agagctcaga gacccgcagc attaccaaca ccacagtgtg taccaagtgt
                                                                     1140
ggaggggctg gccacattgc ttcagactgt aaattccaaa ggcctggtga tcctcagtca
                                                                     1200
gctcaggata aagcacggat ggataaagaa tatttgtccc tcatggctga actgggtgaa
                                                                     1260
gcacctgtcc cagcatctgt gggctccacc tctgggcctg ccaccacacc cctggccagc
                                                                     1320
geacctegte etgetgetee egecaacaac ceacetecae egteteteat gtetaecaec
                                                                     1380
cagageegee caecetggat gaattetgge cetteagaga gteggeeeta ceaeggeatg
                                                                     1440
catggaggtg gtcctggtgg gcccggaggt ggcccccaca gcttcccaca cccattaccc
                                                                     1500
agcetgacag gtgggeatgg tggacatece atgeageaea acceeaatgg acceecacee
                                                                     1560
cettggatge agecaceace accacegatg aaccagggee eccaceetee tgggeaceat
                                                                     1620
ggccctcctc caatggatca gtacctggga agtacgcctg tgggctctgg ggtctatcgc
                                                                     1680
ctgcatcaag gaaaaggtat gatgccgcca ccacctatgg gcatgatgcc gccgccgcg
                                                                     1740
cegeetecca gtgggeagee eccaececet ceetetggte etettecece atggeaacaa
                                                                     1800
cagcagcagc agecteegee acceeteeg eccageagea gtatggette cagtaceeee
                                                                     1860
ttgccatggc agcaaaatac gacgactacc accacgageg ctggcacagg gtccatcccg
                                                                     1920
ccatggcaac agcagcaggc ggctgccgca gcttctccag gagcccctca gatgcaaggc
                                                                     1980
aaccccacta tggtgcccct gccccccggg gtccagccgc ctctgccgcc tggggcccct
                                                                     2040
ececeteege egecteeace geetggttee geeggeatga tgateeetee eegeggegge
                                                                     2100
gatggcccga gccatgagag tgaggacttt ccgcgcccat tggtgaccct tccaggcaga
                                                                     2160
cagceteage aacgeeetg gtggacagga tggtteggea aageageetg agttattttt
                                                                     2220
gtggacggaa tcggaacacg ctggctccat atcgtgaaat ttttattaat tttttcttt
                                                                     2280
ttcctttgtt acttcttt
                                                                     2298
       1387
1340
DNA
Homo sapiens
<400> 1387
gcacccggca gcggtctcag gccaagcccc ctgccagcat ggccagcgag ttcaagaaga
                                                                       60
agetettetg gagggeagtg gtggeegagt teetggeeae gaeeetettt gtetteatea
                                                                      120
gcatcggttc tgccctgggc ttcaaatacc cggtggggaa caaccagacg gcggtccagg
                                                                      180
acaacgtgaa ggtgtcgctg gccttcgggc tgagcatcgc cacgctggcg cagagtgtgg
                                                                      240
gccacatcag cggcgcccac ctcaacccgg ctgtcacact ggggctgctg ctcagctgcc
                                                                      300
agatcagcat cttccgtgcc ctcatgtaca tcatcgccca gtgcgtgggg gccatcgtcg
                                                                      360
ccaccgccat cctctcaggc atcacctcct ccctgactgg gaactcgctt ggccgcaatg
                                                                      420
acctggctga tggtgtgaac tcgggccagg gcctgggcat cgagatcatc gggaccctcc
                                                                      480
agetggtget atgegtgetg getactaceg accggaggeg cegtgacett ggtggetcag
                                                                      540
ccccccttgc categgcctc tctgtagccc ttggacacct cctggctatt gactacactg
                                                                      600
gctgtgggat taaccctgct cggtcctttg gctccgcggt gatcacacac aacttcagca
                                                                      660
accactggat tttctgggtg gggccattca tcgggggagc cctggctgta ctcatctacg
                                                                      720
acttcatcct ggccccacgc agcagtgacc tcacagaccg cgtgaaggtg tggaccagcg
                                                                      780
```

gccaggtgga	ggagtatgac	ctggatgccg	acgacatcaa	ctccagggtg	gagatgaagc	840
ccaaatagaa	ggggtctggc	ccgggcatcc	acgtaggggg	caggggcagg	ggcgggcgga	900
gggagggag	gggtgaaatc	catactgtag	acactctgac	aagctggcca	aagtcacttc	960
cccaagatct	gccagacctg	catggtcaag	cctcttatgg	gggtgtttct	atctctttct	1020
ttctctttct	gtttcctggc	ctcagagctt	cctggggacc	aagatttacc	aattcaccca	1080
ctcccttgaa	gttgtggagg	aggtgaaaga	aagggaccca	cctgctagtc	gcccctcaga	1140
gcatgatggg	aggtgtgcca	gaaagtcccc	cctcgcccca	aagttgctca	ccgactcacc	1200
tgcgcaagtg	cctgggattc	taccgtaatt	gctttgtgcc	tttgggcacg	gccctccttc	1260
	atgcaccttg					1320
_	gggcaagctt					1340
010 100						
<210> 138 <211> 312	8 8					
<212> DNA <213> Hom	o sapiens					
<400> 138		*****				
	ttggtctgaa					60
	tgtgccagga					120
	agagcaggag					180
	gccccgactc					240
	tccccgaagg					300
	gcattttctt					360
	gcagtggctg					420
	caggcctgac				_	480
	cctcagcttc					540
	tgggtggggc					600
	agggggaagc					660
	gcgacttcat					720
	gcctggaaga					780
	tctcccacgc					840
	agcctcctga					900
ccagactcca	tgcgcctctc	gtggagcgtg	gcccagggcc	cctttgattc	cttcgtggtc	960
cagtatgagg	acacgaacgg	gcagccccag	gccttgctcg	tggacggcga	ccagagcaag	1020
	caggcctgga					1080
gaagggaagc	gcctggggcc	cctctcagct	gagggcacca	cagggctggc	tcctgctggt	1140
	aggagtcaag					1200
	ggctcaactg					1260
	catcaccaag					1320
	cggggacgcg					1380
	cactgtatgg					1440
	tcagcccagt					1500
	ccaaggtcaa					1560
	tggcggacgg					1620
acccagaaac	tccaggggct	gatcccaggc	gctcgctatg	aggtgaccgt	ggtctcggtc	1680
cgaggctttg	aggagagtga	gcctctcaca	ggcttcctca	ccacggttcc	tgacggtccc	1740
	gtgcactgaa					1800
	tggacaccta					1860
	caggcagcgc					1920
	cagtgcgtgg					1980
ttcaccacag	ggctagaggc	ccctcgggac	ttggaggcca	aggaagtgac	ccccgcacc	2040

```
gccctgctca cttggactga gcccccagtc cggcccgcag gctacctgct cagcttccac
                                                                     2100
acccctggtg gacagaacca ggagatcctg ctcccaggag ggatcacatc tcaccagctc
                                                                     2160
cttggcctct ttgggtccac ctcctacaat gcacggctcc aggccatgtg gggccagagc
                                                                     2220
etectgeege cegtgteeac etettteace aegggtggge tgeggateec etteceeagg
                                                                     2280
gactgcgggg aggagatgca gaacggagcc ggtgcctcca ggaccagcac catcttcctc
                                                                     2340
aacggcaacc gcgagcggcc cctgaacgtg ttttgcgaca tggagactga tgggggcggc
                                                                     2400
tggctggtgt tccagcgccg catggatgga cagacagact tctggaggga ctgggaggac
                                                                     2460
tatgcccatg gttttgggaa catctctgga gagttctggc tgggcaatga ggccctgcac
                                                                     2520
agcctgacac aggcaggtga ctactccatc cgcgtggacc tgcggggctgg ggacgaggct
                                                                     2580
gtgttcgccc agtacgactc cttccacgta gactcggctg cggagtacta ccgcctccac
                                                                     2640
ttggagggct accacggcac cgcaggggac tccatgagct accacagcgg cagtgtcttc
                                                                     2700
tetgecegtg ategggaece caacagettg eteateteet gegetgtete etacegaggg
                                                                     2760
gcctggtggt acaggaactg ccactacgcc aacctcaacg ggctctacgg gagcacagtg
                                                                     2820
gaccatcagg gagtgagctg gtaccactgg aagggcttcg agttctcggt gcccttcacg
                                                                     2880
gaaatgaagc tgagaccaag aaactttcgc tccccagcgg ggggaggctg agctgctgcc
                                                                     2940
cacctctctc gcaccccagt atgactgccg agcactgagg ggtcgccccg agagaagagc
                                                                     3000
cagggtcctt caccacccag ccgctggagg aagccttctc tgccagcgat ctcgcagcac
                                                                     3060
tgtgtttaca ggggggaggg gaggggttcg tacaggagca ataaaggaga aactgaggta
                                                                     3120
cccgaaaa
                                                                     3128
<210>
       DNA
Homo sapiens
ctgaaggcgg aaccacgacg ggcagagagc acggagccgg gaagcccctg ggcgcccgtc
                                                                       60
ggagggctat ggagcagcgg ccgcggggct gcgcggcggt ggcggcggcg ctcctcctgg
                                                                      120
tgctgctggg ggcccgggcc cagggcggca ctcgtagccc caggtgtgac tgtgccggtg
                                                                      180
acttccacaa gaagattggt ctgttttgtt gcagaggctg cccagcgggg cactacctga
                                                                      240
aggccccttg cacggagccc tgcggcaact ccacctgcct tgtgtgtccc caagacacct
                                                                      300
tettggeetg ggagaaceae cataattetg aatgtgeeeg etgeeaggee tgtgatgage
                                                                      360
aggeeteeca ggtggegetg gagaactgtt cageagtgge egacaceege tgtggetgta
                                                                      420
agccaggctg gtttgtggag tgccaggtca gccaatgtgt cagcagttca cccttctact
                                                                      480
gccaaccatg cctagactgc ggggccctgc accgccacac acggctactc tgttcccgca
                                                                      540
gagatactga ctgtgggacc tgcctgcctg gcttctatga acatggcgat ggctgcgtgt
                                                                      600
cctgccccac gagcaccctg gggagctgtc cagagcgctg tgccgctgtc tgtggctgga
                                                                      660
ggcagagtag gtggtgtgct gggaatgcgc gtgggagaac tgggatggac cgaggggagg
                                                                      720
cgggtgagga ggggggcaac cacccaacac ccaccagctg ctttcagtgt tctgggtcca
                                                                      780
ggtgctcctg gctggccttg tggtccccct cctgcttggg gccaccctga cctacacata
                                                                      840
ccgccactgc tggcctcaca agcccctggt tactgcagat gaagctggga tggaggctct
                                                                      900
gaccccacca ccggccaccc atctgtcacc cttggacagc gcccacaccc ttctagcacc
                                                                      960
teetgacage agtgagaaga tetgeacegt ceagttggtg ggtaacaget ggaceeetgg
                                                                     1020
ctaccccgag acccaggagg cgctctgccc gcaggtgaca tggtcctggg accagttgcc
                                                                     1080
cagcagaget ettggccccg etcgtgcgcc cacactetcg ccagagtece cagccggete
                                                                     1140
gccagccatg atgctgcagc cgggcccgca gctctacgac gtgatggacg cggtcccagc
                                                                     1200
geggegetgg aaggagtteg tgegeaeget ggggetgege gaggeagaga tegaageegt
                                                                     1260
ggaggtggag atcggtctct tccgagacca gcagtacgag atgctcaagc actggcgcca
                                                                     1320
gcagcagccc gcgggcctcg gagccgttta cgcggccctg gagcgcatgg ggctggacgg
                                                                     1380
ctgcgtggaa gacttgcgca gccgcctgca gcgtggcccg tgacacgcag cccacttgcc
                                                                     1440
acctaggege tetggtggee ettgeagaag eectaagtae ggttaettat gegtgtagae
                                                                     1500
```

attttatgtc	acttattaag	ccgctggcac	ggccctgcgt	aggcacacca	gccggcccca	1560
					gtcgagaggg	1620
					attaaatctg	1680
tgaaagaaat	aaagaaaaaa	acaaaacaaa	acaaaaaaaa	aaaaaaaaa	aaaaaaaaa	1740
aaa						1743
<210> 1390 <211> 3833 <212> DNA <213> Homo	) 3 o sapiens					
<400> 1390 gtgaattccg	) caccatctct	ctcctgcctg	tagaatttet	gtcaactagt	cgtggaggga	60
					taagaaagag	120
					gaaggaggcc	180
		ctggaccctt				240
					aggaggaaca	300
					tctttctgag	360
		aaggaaatgg				420
		tgagaggcac				480
					taaggataag	540
		tcttgaagtg				600
		gagaagtgga				660
		tagggaggtg				720
		caccaaaccc				780
		catgctgaag				840
		aattcttgat				900
		ggcagatcca				960
					gagcatcctg	1020
		gacagatgat				1080
aaatgttcta	ctgagctctt	agtaagagag	cctccaatta	tggtgaccaa	acagctggaa	1140
		ggagagagtg				1200
gcccaagtaa	aatggtttaa	gaatggtgaa	gagattatcc	tggtccaaac	aagataccga	1260
attagagttg	agggtaaaaa	acacatcttg	atcatagagg	gagcaacaaa	ggctgatgct	1320
gcagattatt	cagtaatgac	aacaggagga	caatcatctg	ctaaacttag	tgttgacttg	1380
aaacctctga	agattttgac	acctctgact	gatcagactg	taaatcttgg	aaaagaaatc	1440
tgcctgaagt	gtgaaatctc	tgaaaacata	ccaggaaaat	ggactaaaaa	tggcctacct	1500
gttcaggaga	gtgaccgtct	aaaggtggtt	cacaagggaa	ggatccacaa	gttagtgata	1560
gatcatgccc	tcactgaaga	tgaaggtgat	tatgtatttg	cacctgatgc	ctacaatgtt	1620
		tgttattgat				1680
		gattgcagga				1740
		catgtggagc				1800
		ttaccctgat				1860
		ccacatcaat				1920
agcatcaagg						1980
gtgggagatg						2040
atcctaggat						2100
tttgatctct						2160
gaggtccgca						2220
ccttttgttc						2280
gacacgactg	tcacgatgag	gtggcgcccc	ccagaccaca	ttggtgcagc	aggtttagat	2340

```
ggctatgtgc tagagtattg ctttgaagga agtacatcag caaaacagtc tgatgaaaat
                                                                     2400
ggggaggctg cctatgatct gccagctgag gactggatag ttgcaaacaa agatctgatt
                                                                     2460
gacaagacga agttcaccat cacaggtctg ccaacagatg caaagatctt tgtgcgtgtg
                                                                     2520
aaggetgtta atgeagetgg tgeeagegag ceeaagtaet atteteagee cattetegtg
                                                                     2580
aaggaaatca tagaacctcc aaagatacac agtcccaagc acctgaagca aacatatatc
                                                                     2640
cgccgagtag gagaccgtgt cattettgtt atccetttee agggaaaace aagaccagaa
                                                                     2700
ttaacttgga agaaggatgg tgcagaaatt gataagaatc aaataaacat tcgcaactct
                                                                     2760
gagactgata caatcatatt tattagaaaa gcagagagga gccactctgg gaaatatgat
                                                                     2820
ctgcaagtca aagtggacaa attcgtggag accgcatcaa ttgacatcag aatcattgac
                                                                      2880
egtecaggte caceceaat tgtgaagatt gaggatgtet gggggagaaa tgtegetete
                                                                     2940
acatggactc caccaaagga tgatggaaat gctgctatca caggctatac cattcagaag
                                                                     3000
gctgacaaga agagcatgga atggttacgt gtcattgagc atatcatcga accagtgcca
                                                                     3060
catactgaat tggtcatagg gaatgaatat tacttccggg tcttttctga aaacatgtgt
                                                                     3120
ggcctcagtg aggatgccac catgactaaa gagagtgcag tgatcgccag ggatggtaaa
                                                                     3180
atctacaaaa atccagtgta tgaagacttt gatttctcag aggcacccat gtttactcag
                                                                     3240
cctttggtta accgcctatg ccatagcggt tacatggcca ccctaaactg cagtgtgaga
                                                                     3300
ggaaatccta agcctaaaat aacctggatg aaaaacaaag ttgctattgt ggatgatcca
                                                                     3360
agatacagga tgttcagcaa cctgggagtc tgtaccctgg aaattggcaa gcccagccct
                                                                     3420
tatgatggag gcacttactg ctgcaaagca gtcaatgacc ttgggacagt ggagattgaa
                                                                     3480
tgcaaactgg aggtgaaagt cattgcacaa taaggatttt tggaatgtat aatatcatct
                                                                     3540
aaggtgggct ctccttctgc agactcctct tgcaaggcgt acctccaaac ataattgatt
                                                                     3600
gctatctgcg agacttacac tcaagcaatc ctgaggaata ctgagggagg gcctggctac
                                                                     3660
tgtctctctg cactctgctg ctttgaaatc tggttgaaat gagaaaaagc attttctgtt
                                                                     3720
ttcccaccag gcccccaagt gtggtctttt tctttcctcc taatgttgaa gagaaaaaaa
                                                                     3780
aaaaaaaaaa agtttgccca gattgcttaa ttaaaaattg caaacaaaat ctc
                                                                     3833
       1391
1443
DNA
Homo sapiens
<400> 1391 cctactccac gaactgatgc gcccacccca ggcagtaact ctactcccgg attgaggcct
                                                                       60
gtacctggaa aaccaccagg agttgaccct ttggcctcaa gcctaaggac cccaatggca
                                                                      120
gtaccttgtc catatccaac tccatttggg attgtgcccc atgctggaat gaacggagag
                                                                      180
ctgaccagcc ccggagcggc ctacgctggg ctccacaaca tctcccctca gatgagcgca
                                                                      240
gctgctgccg ccgccgctgc tgctgctgcc tatgggagat caccagtggt gggatttgat
                                                                      300
ccacaccatc acatgcgtgt gccagcaata cctccaaacc tgacaggcat tccaggagga
                                                                      360
aaaccagcat actccttcca tgttagcgca gatggtcaga tgcagcctqt cccttttcca
                                                                      420
ecegacece teateggace tggaatecee eggeatgete gecagateaa cacceteaac
                                                                      480
cacggggagg tggtgtgcgc ggtgaccatc agcaacccca cgagacacgt gtacacgggt
                                                                      540
gggaagggcg cggtcaaggt ctgggacatc agccacccag gcaataagag tcctgtctcc
                                                                      600
cagctcgact gtctgaacag ggataactac atccgttcct gcagattgct ccctgatggt
                                                                      660
egeaccetaa ttgttggagg ggaagceagt actttgteea tttgggaeet ggeggeteea
                                                                      720
accccacgca tcaaggcaga gctgacatcc tcggcccccg cctgctatgc cctggccatc
                                                                      780
agccccgatt ccaaggtctg cttctcatgc tgcagcgacg gcaacatcgc tgtgtgggat
                                                                      840
ctgcacaacc agaccttggt gaggcaattc cagggccaca cagatggagc cagctgtatt
                                                                      900
gacattteta atgatggeac caagetetgg acaggtggtt tggacaacac ggtcaggtec
                                                                      960
tgggacctgc gggaggggcg gcagctgcag cagcacgact tcacctccca gatcttttct
                                                                     1020
ctgggctact gcccaactgg agagtggctt gcagtgggga tggagaacag caatgtggaa
                                                                     1080
gttttgcatg tcaccaagcc agacaaatac caactacatc ttcatgagag ctgtgtgctg
                                                                     1140
```

tcgctcaagt ttgcccat	tg tggcaaatgg	tttgtaagca	ctggaaagga	caaccttctg	1200
aatgcctgga gaacgcct					1260
cttagctgtg acatctco	gt ggacgacaaa	. tacattgtca	ctggctctgg	ggataagaag	1320
gccacagttt atgaagtt					1380
ctggtagcac tttgctct					1440
gga					1443
2010s 1200					
<pre>&lt;210&gt; 1392 &lt;211&gt; 1309 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</pre>					
<212> DNA <213> Homo sapiens					
<220> <221> misc feature <223> n=a,t,g or c					
<221> misc feature <223> n=a,t,g or c					
-400- 1200					
<400> 1392 actttctctc tctttcga	tt cttccatact	cagagtacgc	acggtctgat	tttctctttq	60
gattcttcca aaatcaga					120
caaggagacc cacggttg					180
ttgccaaata cttctcta					240
atgtgtatat gaagagaa					300
cacctttcat gtgtaata					360
ctaaccgtgg gaatcagg					420
ccccgaagat catgccca					480
aagcatctgg cccacaaa					540
ctgagaagat tcacgaga					600
tgcgtgagag aaaacagc					660
agtaactccc ctcaggga	ta cgacacatgc	ccatgatgag	aagcagaacg	tggtgacctt	720
tcacgaacat gggcatgg					780
gtgttcacaa cagtgaaa					840
agcgtttacg ttgtattt					900
atgacgcaag ccatactt					960
aaccaagnat tgccggtt					1020
tgactactga ggcagttc					1080
cacgacacaa accacacc					1140
agtaccagta taagcatc					1200
ccctcactct gtttcctg					1260
ctgcacagtt aataaacc					1309